



SARASWATI

DENTAL COLLEGE - LUCKNOW

ISO 9001:2008

Annual Report 2012-13



233, Tiwariganj, Faizabad Road, Chinhat, Lucknow
www.saraswaticolleges.com

MAA SARASWATI



The Goddess of Learning

ABOUT US

Saraswati Dental College & Hospital, Lucknow, established in 1998 under the Chairmanship of Lt. Col. (Dr.) TS Mathur (Rtd.), is an ISO 9001:2008 certified non-profit institution committed to the policy of equal opportunity to all in every aspect of its operations and balanced pursuit of excellence in teaching, research and community service. Our attractive, self-contained campus sprawling over 8 acres of lush green land with more than 2,00,000 sq ft of constructed academic, clinical and recreational area with modern amenities has been designed to create the best possible learning environment. As per DCI requirements, there is a functional 100-bedded hospital attached to this Institution. The serene environment also meets the needs of students and staff to talk, recharge and have fun. It is managed by top professionals and has more than 3500 alumni.

Saraswati Dental College & Hospital, Lucknow is recognised by the Dental Council of India, the Ministry of Health & Family Welfare, Govt. of India, Govt. of Uttar Pradesh and the CPCSEA, Animal Welfare Division, Ministry of Environment & Forests, Govt. of India.

The College offers regular courses in Bachelor of Dental Surgery; Master of Dental Surgery in Conservative Dentistry, Oral & Maxillofacial Surgery, Oral Medicine & Radiology, Oral Pathology & Microbiology, Orthodontics & Dentofacial Orthopedics, Pedodontics & Preventive Dentistry, Periodontics and Prosthodontics & Dental Materials, and Dental Operating Room Assistants (DORA). The College is affiliated to the Dr. Ram Manohar Lohia Awadh University, Faizabad for award of B.D.S. and M.D.S. degrees and to the Integral University, Lucknow for award of Ph.D. degree in Dental, Medical and Basic Sciences.

OUR VISION

- Building global leaders by providing total integrated quality education to students of the group
- To be the front-runner in value education & nurturing traditions and ethos
- To create bridges between industry & academics through continuous interaction and participation
- To transcend boundaries and be global brand in value education

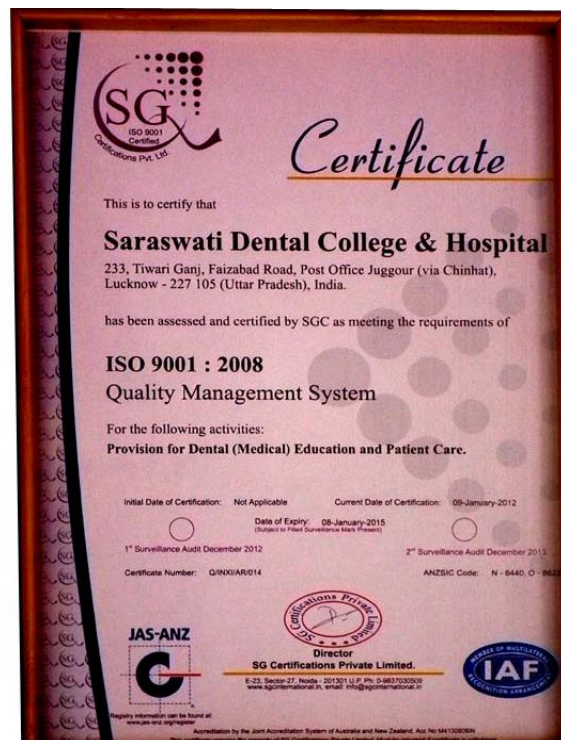
OUR MISSION

- Advance the community of learning by engaging in scientific research, humanistic scholarship, and artistic creation;
- Provide high quality educational experience to undergraduate & graduate students in a diverse learning environment--promoting the values and institutions of democracy that prepare students to lead lives of personal integrity and civic responsibility in a global society;
- Prepare the next generations of skilled and ethical professionals by providing excellent graduate and professional education that prepares graduates to compete in a diverse world market;
- Promote campus environment that welcomes and honors women and men of all races, creeds, and cultures and an atmosphere that values intellectual curiosity, pursuit of knowledge, and academic freedom and integrity
- Conduct research, teaching, and outreach to improve human and animal medicine and health;
- Contribute to improving the quality of life, increasing agricultural productivity, protecting the environment, promoting the well-being of families, and conserving natural resources.
- Offer wide variety of off-campus educational and training programs, including the use of information technologies, to individual and groups;
- Partner with communities to provide educational, technical and cultural support to increase the livability of those communities; and Partner with industry and government to improve the quality of the workplace and to serve as an engine for economic and cultural development.

Center of Academic Excellence



ISO Certification



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| Cover design & Photographs | : | Mr. MS Warsi Mr. Vikash Kumar Gupta |
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With input from Faculty, Staff and Students

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CONTENTS

| | |
|--|----|
| From the Chairman's Desk | 1 |
| From the President's Desk | 2 |
| The Campus | 3 |
| Principal's Report | 5 |
| Institutional Committees | 10 |
| Section I: Research Output | 18 |
| • MoUs Signed | 19 |
| • Publications | 19 |
| • Papers Presented in Conferences | 22 |
| • Invited lectures delivered by Institute Faculty | 24 |
| • CDEs, CMES, Workshops, Training Programs, Seminars, Lectures attended | 25 |
| • Honours, Awards and Special Attainments | 27 |
| Section II: Departmental achievements | 28 |
| • Conservative Dentistry | 29 |
| • Oral & Maxillofacial Surgery | 35 |
| • Oral Medicine & Radiology | 40 |
| • Oral Pathology & Microbiology | 43 |
| • Orthodontics & Dentofacial Orthopedics | 47 |
| • Pedodontics & Preventive Dentistry | 50 |
| • Periodontics | 54 |
| • Prosthodontics | 58 |
| • Public Health (Community) Dentistry | 64 |
| • Anatomy | 67 |
| • Biochemistry | 69 |
| • General Pathology & Microbiology | 70 |
| • Pharmacology | 73 |
| • Physiology | 74 |
| • Geriatric Oral Health Center | 75 |
| • Oral Cancer Detection and Research Center | 76 |

- University and College Toppers 78
- Distinguished Visitors and Lectures 79

Section III : Major Events Organized

- Flag Hoisting 80
 - Blood Donation Camps 81
 - Rotaract Club Saraswati 81
 - Dental Camps and Mobile Dental Van 81
 - Health Mela 82
 - Tree Plantation 83
 - Meetings with village pradhans 84
 - Clean & Clear Times Fresh Face Completion 84
 - Fresher's Party 85
 - Local Sightseeing for first year students 86
 - College Week 87
 - Saraswati Houses 88
 - Impressions 89
-

From the Chairman's Desk



It gives me immense pleasure to know that Saraswati Dental College & Hospital, Lucknow is coming out with its First Annual Report. I congratulate all the staff and students involved in this venture and wish Saraswati Dental College & Hospital the very best.

With love and blessings,

Lt. Col. (Dr.) T.S. Mathur (Rtd.)

From the President's Desk



I am pleased to know that the First Annual Report of Saraswati Dental College and Hospital, Lucknow has been compiled and published.

My best wishes to all those who have contributed to this Report and special thanks to Dr. R.S. Bedi, Principal and Dr. Man Mohan Singh, Research Advisor who have taken great pains to document this achievements of Saraswati Dental College for the Academic Year 2012-13.

Dr. Rajat Mathur

Saraswati Dental College Campus



The lush green campus showing the central play ground surrounded by (clockwise from left: College Canteen, Girls Hostel, Boys Hostel, Open-air Theatre & Staff Flats)



Saraswati Hospital & Research Center



RECEPTION

PRINCIPAL'S REPORT

Prof. RS Bedi, M.D.S.

It is indeed a very proud moment for me to present the Annual Report of Saraswati Dental College & Hospital. This Report is the reflection of phenomenal growth and development the institution has shown in the field of dental education, patient care and research under the able guidance of our beloved Chairman, Members of Management and highly qualified & accomplished team of academicians.

Col. T. S. Mathur, a great visionary and true academician, started this institution in 1998 with a pledge to impart quality education and training to under graduate students. Since the very beginning the institute maintained highest standards of excellence to gain recognition from Dental Council of India in 2002. Post graduate courses were introduced in 2005 in various specialities of dentistry, which got recognized by DCI in 2008. Ignited by the desire to provide best possible health care and other essential medical services to poor & needy people who are deprived of not only dental treatment but also basic medical facilities, Saraswati Hospital & Research Centre was established in 2009.



With an idea of producing highly qualified nurses to provide better nursing care to the patients, Saraswati College of Nursing will be commissioned this year. At this juncture it gives me immense pleasure to announce that this year we have introduced Ph.D. programme in Dental, Medical & Basic Sciences. I will fail in my duties if I did not mention that the dream which Col. TS Mathur had seen decade & a half ago has been realized because of unconditional support he received from our Vice Chairperson Mrs. Madhu Mathur, Dr. Rajat Mathur, Mr. Charit Mathur, Mrs. Smita Mathur, Mrs. Ritu Mathur, all members of managing committee of Saraswati Group of educational institutes and highly dedicated and accomplished faculty and staff of Saraswati Dental College & Hospital.

Our institute has exhibited a continuous endeavour towards excellence which has earned the institution ISO certification 9001/2008 for quality dental education and patient care. Saraswati Dental College and Hospital was voted the best private dental college in north INDIA by brands academy and big brands research which earned us the prestigious "Education Excellence Award- 2012".

The management, faculty and staff works very hard to transform into reality, the very motto of providing quality dental and medical treatment to the down-trodden and underprivileged rural population at their door steps by organizing treatment camps and also providing free treatment to them in Dental College and Saraswati Hospital and Research Centre. Our hospital provides facilities to the patients covered under various patient welfare schemes of Govt. of Uttar Pradesh and Govt. of India. Rashtriya Swasth Bima Yojna, Merry Gold for pregnant females and SIFPSA card holders are few of the schemes under which these patients are received in the hospital. Vaccination is provided for Polio, Hepatitis B, Tetanus Toxoid, Japanese Encephalitis and Measles to all the patients free of cost. Total of 98950 patients were seen in the outdoor patients department of SHRC and more than 30000 cases were given treatment in IPD.

Saraswati Dental College and Hospital also provides free dental treatment to the patients. In 2012, total 131092 patients were seen in dental OPD. A total of 98 major surgeries were performed and 1909 minor surgical procedures were performed in the Department of Oral and Maxillofacial Surgery. The Institution provides full range of preventive, curative and rehabilitative services for the rural population with no cost what-so-ever to the people through Satellite Dental Clinics. There are 3 Satellite Dental Clinics run by Saraswati Dental College and Hospital in and around Lucknow. During the last year, 7385 patients were received and treated in Satellite Clinics.

The Department of Community Dentistry is equipped with a Mobile Dental Van. Saraswati dental college and Hospital has adopted 14 villages around Lucknow city. Under the guidance and dynamic leadership of Mrs. Smita Mathur, Director, Dr V P Singh, Medical Superintendent, and Brigadier Prof. G.P. Singh, head, Department of Community dentistry and Saraswati hospital & research centre collectively organized 170 camps in various villages, schools, colleges and other educational institutes in and around Lucknow. 15000 patients were examined and given treatment. Month of January was celebrated as **Patient welfare month** in which 14784 patients were investigated and provided free dental and medical and treatment. Saraswati Hospital and research centre in collaboration with Rotary club Rajdhani, Lucknow, Lucknow Round table 136 organized two blood donation camps where 70 units of blood were donated. It is pertinent to mention here that 42 Rotractors also donated blood. **Oral hygiene day** was celebrated on 1st of August 2012.

Patient welfare week was again celebrated from 31th Oct to 2nd Nov 2012. Gram Pradhans, Sarpanches and other representatives from adopted villages were invited and educated for their dental and medical needs and were made aware of various patient welfare schemes run by the institution to benefit the rural population of Uttar Pradesh.

We at Saraswati Dental College, try to inculcate the sense of responsibility in our students towards the society. Under the guidance of Dr R M Mathur, founder Principal of Saraswati Dental college and Hospital, The Rotractors of this institution have very enthusiastically participated in organizing various social welfare activities like distribution of goods of daily requirement like food clothing and blankets etc, to the poor and needy, blood donation and vaccination camps, literacy programs, tree plantation programs, dental camps on the campus and outside the campus. Rotractors of Saraswati Dental College Bagged 11 prestigious awards in the year 2012. Time does not permit to count all but few I would like to mention are Best Rotract club of the year award, Best Polio awareness program award, Best literacy program award, Best speaker award and Best theme award for service for humanity. They are planning to run the literacy program on the campus from this year where our under graduate students will teach the illiterate people of all age groups.

In the month of September 2012, **Go Green initiative** was inaugurated by Mr. R K Singh, Secretary Forest and Mr. Sanjay Prasad, Secretary Industries, Govt. of Uttar Pradesh. This function was organized with the help of Forest department to sensitize our staff and students towards environmental safety and preservation. The program was well attended and supported by Lucknow Round Table 136 & Ladies Circle 84...More than 100 trees were planted in and around our campus. Another tree plantation program was held in which fifty more trees were planted in and around the campus by Rotractors and Rotarians

In academics, like previous years, the students of our institution have excelled in year 2012 too. Dr Robin Srivastava a post graduate student in the department of periodontics have stood second amongst post graduate students of all the dental colleges affiliated to Dr Ram Manohar Lohia Avadh University, Faizabad. Miss Sneha Mehrotra, Miss Pridhi Mehra and Miss Saumya Kapoor of BDS final year, secured 1st, 2nd and 3rd positions respectively in the university, in aggregate marks of all the four years, amongst all the students appearing from all dental colleges affiliated to Dr Ram Manohar Lohia Avadh University, Faizabad. Miss Prarthana Dalmiya of BDS 3rd year stood second in the university. Similarly in aggregate of two years Miss Vandana Chauhan, Miss Jyotsana Aggarwal and Miss Anushka Shukla of BDS 2nd year bagged 1st, 2nd, 3rd positions in the university respectively in annual university exam in Dec, 2012. Here in this institution we believe in and strive for over all development of the students. **Talent Hunt program** and **Time Fresh Face** competition was organized in the college to provide wider exposure to the students of Saraswati Dental College.

I feel lucky to have a very dedicated, extremely focused and research oriented faculty who try to go an extra mile to help and guide students in their research projects. To give impetus to research activity in the institution two Memoranda of Understanding have been signed. A MOU was signed between Saraswati Dental College & Hospital and Cancer Biology Research Center, Sanford School of Medicine, University of South Dakota, USA on 05 June 2012 to undertake collaborative research. Another MOU was signed between our institution and Integral University, Lucknow on 02nd April 2013 for the same. Research on Eleven intra mural projects is already underway in Saraswati dental college. Various faculty members have earned accolades for good work at various national and International forums

Dr Arvind Tripathi, a very fine human being and academician of highest caliber, Professor and Head, Department of Prosthodontics and Crown and Bridge, has done wonderfully well to bring the Department of Prosthodontics to International Standard by establishing sleep apnea cleft lip and palate clinics to provide integrated management option for the patients suffering from these diseases last year. He has added another dimension to his department by establishing Geriatric Oral Health Centre at Saraswati Dental College to provide better treatment to elderly people.

Dr Asha Mathur, Prof and Head, Department of Microbiology, Saraswati dental college and hospital is a name which needs no introduction. She is pioneer researcher in the field of Japanese Encephalitis. Chapter no. 16 has been dedicated to her in a book titled “the Balancing act- stories of Women” published by Govt. of India. Page 216 – 225. Another chapter has been written on her life in another book titled “**The Girl’s Guide to a life in science** “edited by Ram Ramaswamy, Rohini Godbole and Mandakini Dubey.

Dr Ashok Srivastava, Prof. and Head, Department of Anatomy, Saraswati Dental College was invited as guest faculty at Texila American University, Guyana, South America. He has also been nominated as a member of education council, Government of Uttar Pradesh.

Dr Kapil Loomba, Prof. and Head, Department of Conservative Dentistry and Endodontics is President elect, Indian Endodontic Society. A novel classification given by him on “Fractures of Teeth” has been cited by Quintessence book of conservative dentistry.

Dr Man Mohan Singh, Research advisor, Saraswati Dental College, an accomplished researcher, Formerly: Emeritus Medical Scientist (ICMR), Chief Scientist & Head, Endocrinology Division, Coordinator, Reproductive Health Research Program Central Drug Research Institute, Lucknow, Member Secretary (Lucknow Chapter), The National Academy of Sciences. His presence in the institution in itself is a big asset to the institution. He has published many papers in international and national journals this year.

Dr Sanjeev Srivastava, Professor in the same department, was awarded membership of academy of laser dentistry USA in 2012. He conducted Module I of Diploma course in laser dentistry – organized by North India Chapter, Academy of laser dentistry.

Prof Shaleen Chandra Head Department of Oral Pathology and Microbiology under the able guidance of Dr R M Mathur, our mentor, whose name again does not need any introduction, was instrumental in establishing “Oral cancer detection centre” in the department of Oral Pathology and Microbiology.

Dr Ragini Tondon chaired scientific session at 47th Indian Orthodontic Society Conference held at New Delhi in Nov 2012.

Forty five research papers were published in national and international indexed journals by the faculty in year 2012 in addition to innumerable CDE’s and Conferences attended by faculty members of this institute.

Paper presented by **Dr Basit Hasan**, post graduate student, Department of Conservative Dentistry and Endodontics won first prize at 13th IACDE & IES Post Graduate Convention, Kasauli, 21-22 April 2012.

Dr Upasana Khemka, post graduate student of Oral and Maxillofacial Surgery, was awarded second prize for paper presentation in prized paper category at COSMOS – International conference for ENT Surgeons, Oral and Maxillofacial Surgeons and Plastic Surgeons held at Mangalore in Feb, 2013. It is pertinent to note that out of 102 papers submitted by various institutions, all the five papers submitted by Post graduate students of Department of Oral and Maxillofacial Surgery were selected for prize paper presentation category.

Dr Manoj Yadav, post graduate student of Department of Oral and Maxillofacial Surgery, was awarded second prize for Quiz competition on “Basic Life Support” held at SPPGI Lucknow in Sept, 2012.

Three of Our faculty members were invited to deliver Guest lectures at various national and international forums

Dr. Arvind Tripathi Professor and Head Department of Prosthodontics and crown & Bridge delivered a guest lecture on “Elements of treatment planning in patients of Maxillofacial Prosthetics” Prosthodontic Workshop, SPIDMS, 02 Jan 2012

Dr. Sanjeev Srivastava, Professor, Department of Conservative dentistry and Endodontics delivered guest lecture on “Endo-aesthetics”, sponsored by Omega Dent, Lucknow, On March 2012

Dr. Neeraj Kumar, Reader in the department of Conservative dentistry and Endodontics delivered a guest lecture on “Importance of working length”, IDA, Jaunpur, 19 May, 2012

Dr. MS Raju, Professor and Head, Department of Oral Medicine and Radiology delivered guest lecture on “Ultrasound in dentistry”, at Rama Dental College, Hospital and Research Centre, Kanpur, 23 Feb 2013

Dr. GP Singh, Professor, Dept of Community Dentistry presented a talk on “Oral care and effect of periodontal disease on general health”, Air Force Station, Bakshi Ka Talab, Lucknow, 13 July 2012. His lecture was liked so very much that he was invited to deliver the same lecture by Colgate Palmolive at SDC Lucknow on 14 Dec 2012.

Dr R S Bedi, Professor and Head, Department of Oral and Maxillofacial Surgery has been invited by Ministry of health, Govt of Libya to deliver a lecture at Tripoli, in Sept, 2013.

Words fail me as I try to say a few words for our revered Col. T.S. Mathur, Chairman, Saraswati group of Educational Institutes, who is an epitome of goodness, honesty, positivity and everybody’s ultimate hope in case we feel any storm is rocking us. He is our pillar of strength, our Cape of Good Hope and we always pray to Lord Almighty that you are blessed with good health and a long life. As is always said that behind every successful man is a woman, so the undeniable fact is that, we have Our Honourable Vice Chairman to thank for being the silent practical support behind Col. T.S. Mathur. May you always keep on blessing us with your maternal touch.

I am highly thankful to Dr. Rajat Mathur, President Saraswati Group of Educational Institutes, who leads from the front and has been constantly guiding us to compile the “Annual Report” magazine. I would like to express heartfelt gratitude towards Mr. Charit Mathur, Director Finance, Saraswati Group of Educational Institutes, for his never ending unconditional support in running the affairs of the institute. There are few people who always reiterate our hope in silence and genuine goodness of human nature and Mrs. Smita Mathur, Director, Saraswati Hospital and Research Centre is one such person. I thank her for her support. The co-operation of Mrs. Ritu Mathur for all our endeavors in organizing various functions is also highly appreciated. May this institution be always blessed by her dynamic support.

Lastly I wish to thank the editorial committee who actually burnt midnight oil to make this tastefully designed magazine see the light of the day. I am also thankful to the faculty, staff and students of Saraswati Dental College and Hospital and the faculty and staff of Saraswati Hospital and Research Centre for standing by me in all kind of difficult times. I hope that this togetherness and unity will lead us to even greater success.

Thank you



Institutional Committees

The Principal, SDC shall be the ex-officio member of all Institutional Committees

Research, Development & Scientific Committee

| | | |
|---------------------|---|------------------|
| Dr. Rajat Mathur | : | Chair |
| Dr. RM Mathur | : | Members |
| Dr. RS Bedi | : | Members |
| Dr. Asha Mathur | : | Members |
| Dr. Vivek K Bains | : | Members |
| Dr. Vineet Raj | : | Members |
| Dr. Man Mohan Singh | : | Member Secretary |

Human Research Ethics Committee

| | | |
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| Lt. Col. (Dr.) TS Mathur (Rtd.) | : | Chair |
| Dr. RM Mathur | : | Member |
| Mr. Vijay Acharya | : | Advocate, Lucknow |
| Mrs. Kusumangini Mathur | : | Social Person |
| Fr. Paul Mascarenhas | : | Principal, Cathedral School, Lucknow |
| Dr. RS Bedi | : | Member |
| Dr. Arvind Tripathi | : | Member Secretary |

Animal Ethics Committee

approved by the CPCSEA, Ministry of Forests & Environment, Govt. of India

| | | |
|----------------------------|---|------------------|
| Dr. Rajat Mathur | : | Chair |
| Dr. RS Bedi | : | Member |
| Dr. Dinesh Chandra Purohit | : | Member |
| Smt. Anita Srivastava | : | Member |
| Dr. Biswajeet Maity | : | Member |
| Dr. DS Upadhyay | : | Member |
| Dr. Arvind Tripathi | : | Member |
| Dr. AK Srivastava | : | Member |
| Dr. Man Mohan Singh | : | Member Secretary |

Finance Committee

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|---------------------------------------|---|--------|
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| Dr. R. M. Mathur Director HR (SDC) | : | Member |
| Mr. Ajay Aggarwal | : | Member |

Purchase & Maintenance Committee

| | | |
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| Dr. Ragni Tondon | : | Member |
| Dr. AP Dupare | : | Member |
| Dr. AK Srivastava | : | Member |
| Dr. Rajesh Jhingran | : | Member |
| Mr. Ashok Yadav Purchase Officer | : | Member |

Student & Patient Welfare Committee

| | | |
|--|---|------------------|
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| Dr. VP Singh | : | Member |
| Dr. Alka Yadu | : | Member |
| Dr. LC Gupta | : | Member |
| Dr. A. K. Srivastava | : | Member |
| Dr. Atul Jain | : | Member Secretary |
| Dr. Vineet Raj | : | Member |
| Mr. Dinesh Sawhney Administrative Officer | : | Member |

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| Dr. LC Gupta | : | Member |
| Dr. AK Srivastava | : | Member Secretary |
| Dr. Neerja Raj | : | Member |
| Mr. Dinesh Sawhney Administrative Officer | : | Member |

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| Dr. Rajesh Jhingran | : | Member |
| Dr. JS Kesave | : | Member |
| Dr. Vikas Srivastava | : | Member |

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| Dr. Asha Mathur | : | Member |
| Dr. LC Gupta | : | Member |
| Dr. Sushil Kar | : | Member |

Library & Learning Resources Committee

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| Dr. KL Dange | : | Member |
| Dr. Ragni Tondan | : | Member |
| Dr. Rachna Bahuguna | : | Member |

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| Dr. Rohit Madan | : | Member |
| Dr. Priya Singh | : | Member |
| Dr. Ashish Goel | : | Member |

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| Dr. SA Khan | : | Member Secretary |
| Dr. Neerja Raj | : | Member |
| Dr. Vivek Gupta | : | Member |
| Dr. Akansha Srivastava | : | Member |
| Dr. Poonam Goel | : | Member |
| Dr. Dipti Singh | : | Member |
| Dr. Rohit Madan | : | Member |

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| Dr. GP Singh | : | Member |
| Dr. Vivek K Bains | : | Member |
| Dr. Rohit Madan | : | Member |
| Dr. Nitin Singh | : | Member |
| Dr. Ashish Goel | : | Member |
| Dr. Shitij Srivastava | : | Member |
| Dr. Nimish Gupta | : | Member |
| Dr. Saurabh Mathur | : | Member |
| Dr. Gaurav Mishra | : | Member |

Editorial Board,

Asian Journal of Oral Health & Allied Sciences

| | | |
|--------------------------|---|--|
| Chairman | : | Lt. Col. (DR.) Dr. TSMathur (Rtd.) |
| Vice-Chairman | : | Dr. Rajat Mathur |
| Editors | : | Dr. RM Mathur Dr. Pradip Jayna |
| Associate Editors | : | Dr. RS Bedi Dr. Kapil Loomba Dr. Arvind Tripathi |

Animal Ethics Committee Meeting



From left: Dr. Arvind Tripathi, Dr. AK Srivastava, Dr. Man Mohan Singh, Dr. Biswajeet Maity, Dr. Rajat Mathur (Chairman), Mrs. Anita Srivastava, Dr. DS Upadhyay, Dr. Dinesh Chandra Purohit, Mr. HV Bali (Secretary, SDC&H)



From left: Dr. AK Srivastava, Dr. Man Mohan Singh, Dr. Rajat Mathur (Chairman), Dr. Arvind Tripathi, Dr. Biswajeet Maity, Dr. Dinesh Chandra Purohit, Mrs. Anita Srivastava, Dr. DS Upadhyay

CPCSEA Approved Laboratory Animals Facility



Mr. Kamal Haasan releasing Volume 2, Issue 1 of the Asian Journal of Oral Health & Allied Sciences



The Administration

Mr. Dinesh Sawhney
Administrative Officer



| | | |
|-------------------------------|---|---|
| Mr. MP Singh | : | Asst. Administrative Officer |
| Mr. Ashish Mathur | : | Public Relations Officer |
| Mrs. Tanu Dubey | : | HR Executive |
| Office Support Staff | : | Mr. Pramod Srivastava : Mr. NB Mishra : Mr. Kaushlendra Kashyap : Mr. Praveen Trivedi |
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| Mr. Ajay Mishra | : | Accountant |
| Mr. Sanjeev Shukla | : | System Administrator |
| Mr. Ashok Yadav | : | Purchase Officer |
| Reception - Management OPD | : | Mrs. Kavita Bhatia : Mr. Anil Verma : Mr. Rinku Singh |
| Capt. DS Bisht | : | Incharge, Medical Store |
| Mr. PS Saini | : | Incharge, General Store |
| Library staff | : | Mrs. Sunita Srivastava : Mr. Brijesh Awasthi : Mrs. Charul Rastogi : Mr. Upendra Dwivedi |
| Mr. Mohd. Shaheer Warsi | : | Incharge, Photography Section |
| Mr. Satish Chand | : | Maintenance Supervisor |



Section I

Research Output

Synopsis of Research Output for the year 2012-13

| | |
|---|------|
| • Publications | : 54 |
| Review Articles | : 13 |
| Book Chapters | : 03 |
| Full length Papers | : 39 |
| Popular Science Articles | : 01 |
| • Papers presented at Conferences | : 41 |
| • Faculty invited to deliver Guest Lectures | : 04 |
| • CDEs, CMEs, Workshops etc. attended | : 18 |
| • Honors, Awards received by Faculty & Students | : 13 |

Memoranda of Understanding signed

A. Cancer Biology Research Center, Sanford School of Medicine, University of South Dakota, USA

A MoU was signed between Saraswati Dental College & Hospital, Lucknow and Cancer Biology Research Center, Sanford School of Medicine, University of South Dakota, USA on 05 June 2012 to:

- Undertake collaborative research in dental and related areas
- Use expertise and facilities on mutually agreed research projects
- Jointly submit research projects to the National and International funding agencies or pharmaceutical companies for extramural funding

B. Integral University, Dasauli, P.O. Bas-ha Kursi Road, Lucknow

Two MoUs were signed between Saraswati Dental College & Hospital, Lucknow and Integral University, Dasauli, P.O. Bas-ha Kursi Road, Lucknow on 02 April 2013 to:

- Undertake collaborative research in dental and related areas
- Use expertise and facilities on mutually agreed research projects
- Jointly submit research projects to the National and International funding agencies or pharmaceutical companies for extramural funding
- Initiate Ph.D. program at SDC&H and enroll its teaching/research/clinical faculty and students with the Integral University for award of Ph.D. degree in Dental Sciences/Medical Sciences/Biosciences/Life Sciences

Publications

A. Review articles

1. Rawatia M, Verma K, Singh S, Munuga S, Khan S. MTA-based root canal sealers. *J Orofac Res* 3(1):16-21, 2013.
2. Chandra P, Agrawal S. Intraoral molar distalization – Review. *Philippines J Orthodont* 11(1):37-41, 2012.
3. Chandra P, Agarwal S, Singh D, Agarwal S. Intraoral molar distalization - A review. *J Dentofac Sci* 1(1):15-18, 2012.
4. Golwara A, Azam A, Chandra S. Adult orthodontics: Strategic treatment in the face of existing periodontal disease. *J Clin Res Dent* 3(5):25-27, 2012.
5. Issrani R, Ammanagi R, Keluskar V. Geriatric dentistry – Meet the need. *Gerodontology* 29:e1-e5, 2012.
6. Kabra P, Loomba K, Kabra SK, DSP Majumdar, Kumar N, Medicinal plants in the treatment of dental caries. *Asian J Oral Health Allied Sci* 2(1):12-16, 2012.
7. Kashyap B, Reddy PS. Micronuclei assay of exfoliated oral buccal cells: Means to assess the nuclear abnormalities in different diseases. *J Cancer Res Ther* 8:184-191, 2012.
8. Khan SA, Khan SY, Bains VK, Bains R, Loomba K. Dens Invaginatus: Review, relevance and report of 3 cases. *J Dent Children* 79(3):143-153, 2012.
9. Kumar N, Srivastava S, Majumdar DPS, Loomba K. Veneer in restorative dentistry: A review article. *Asian J Oral Health Allied Sci* 2(1):17-25, 2012.
10. Kumar N, Bains R, Loomba K, Jain A. Mineral Trioxide Aggregate (MTA): A hope for root fracture. *Asian J Oral Health Allied Sci* 2(1): 55-58, 2012.
11. Loomba K, Bains R, Bains VK, Loomba A, Nadig R, Shrivastava TV. Tissue engineering and its application in endodontics: An overview. *Endodont Pract Today* 6(2):105-112, 2012.
12. Masthan KMK, Leenasankari S, Aravindhbabu N, Rajguru JP. How to help the oral pathologist in making an accurate diagnosis. *J Clin Diagn Res* 7:181-184, 2013.

13. Rajguru JP, Masthan KMK, Thirugnanasambandan TS, Aravindhababu N. Programmed self-cell suicide (apoptosis) – Current review, concepts and future prospects. *Indian J Multidisciplin Dent* 2:500-506, 2012.

C. Book chapters

14. Saxena SK, Tiwari S, Saxena R, Mathur A, Nair MPN. Japanese Encephalitis Virus: The complex biology of an emerging pathogen. In: *Encephalitis*, Tkachev S (Ed.), InTech, Croatia (European Union), Chapter 10, pp. 161-180, 2013 (doi: 10.5772/54111; ISBN: 978-953-51-0925-9).
15. Singh MM, Mathur R. Periodontal diseases and their association with certain systemic diseases and life style factors. In *Advances in Medicine and Biology*, Vol. 52, Ed. Leon V. Berhardt, Nova Science Publishers, Inc., New York, Chapter 4, pp. 125-154, 2012.

C. Full length research publications

16. Agrawal S, Singh D. Clinical applications of cone-beam computed tomography in periodontics. *GUIDENT* 5(12):67-70, 2012.
17. Agarwal N, Srivastava SK, Bathi RJ, Ahuja P. Assessment of gingival microvasculature changes in young diabetic patient and its correlation with systemic complication. *J Indian Acad Oral Med Radiol* 23(4):163-167, 2012.
18. Bains R, Bains VK, Loomba K, Verma K, Nasir A. Management of pulpal floor perforation and grade II Furcation involvement using MTA and platelet rich fibrin: A Clinical report. *Contemp Clin Dent* 3 (Supplement 2):43-47, 2012.
19. Arun P. Dupare , Dr. Roshni Dupare, Dr. Lata Dupare .A custom made ocular prosthesis rehabilitation of pthisis bulbi patient- *Bhavnagar University Journal Of Dentistry* Vol 3 Issue 1 :1-8, 2012.
20. Arun P. Dupare , Dr. Roshni Dupare, Dr. Lata Dupare .Maxillofacial Prosthetic rehabilitation of a cancer patient at terminal stage: *National Journal of Integrated Research in Medicine* 2012; vol 3 (2) 173-176.
21. Gupta VK, Malhotra S. Pharmacological attribute of Aloe vera: Revalidation through experimental and clinical studies. *AYU (An International Quarterly Journal of Research in Ayurveda)* 33(2):193-196, 2012.
22. Jain A, Tyagi P, Khan SA, Jain M, Agarwal A. Prevalence of dental caries and dental fluorosis amongst children of low, moderate and fluoride areas in Lucknow district of Uttar Pradesh: A clinical survey. *J Indian Assoc Public Health Dent* 20:66-71, 2012.
23. Kar S, Tripathi A. Removable partial dentures of patient with ectodermal dysplasia: A clinical report. *Indian J Dent* (published online; <http://dx.doi.org/10.1016/j.ijd.2012.07.02>).
24. Kar SK, Tripathi A, Singh S. Using neutral zone and mandibular guidance concept to restore esthetic and function in a hemi-mandibulectomy patient. *Indian J Dent Adv* 4(2):875-879, 2012.
25. Kar SK, K, Tripathi A, Singh SV. Full mouth rehabilitation of a hypomaturation type of Amelogenesis Imperfecta: A clinical report. *J Oral Biol Craniofac Res* (published online; <http://dx.doi.org/10.1016/j.jobcr.2012.09.003>).
26. Kaur Amandeep, Chand Puran, Singh D. Raghuwar, Siddharatha Ramashankar Tripathi Arvind, Tripathi Suryakant, Singh Ragini and Mishra Anupam: Computed Tomographic evaluation of the effect of Mandibular Advancement Devices on Pharyngeal Dimension Changes in Patients with Obstructive Sleep Apnea. *Int. J. Prosthodont* Vol 25, No.5, 2012.
27. Kesave JS, Gupta N, Bedi RS. Intellectual Property Rights (IPR) and obtaining a patent: Indian scenario. *Asian Journal Oral Health Allied Sciences* 2(1):8-11, 2012.
28. Kesave JS, Punn K, Bedi RS. Multidisciplinary team management of cleft lip and palate: An Indian perspective. *Asian Journal Oral Health Allied Sciences* 2(1):59-62, 2012.
29. Khan SA, Khan SY, Bains VK, Bains R, Loomba K. Dens invaginatus: review, relevance, and report of 3 cases. *J Dent Child* 79(3):143-153, 2012.
30. Loomba A, Goel A, Verma P. Quantitative analysis of Nickel Titanium Arch Wires. *J Indian Orthodont Soc* 46(4):92-98, 2012.
31. Loomba A, Loomba K, Bains R, Bains VK. Management of a dentigerous cyst in a medically compromised geriatric patient: A case report. *Gerodontology* 29(2):e1190-e1194, 2012.
32. Makker A, Singh MM, Mishra G, Singh BP, Jain GK, Jadhav S. Relationship between bone turnover biomarkers, mandibular bone mineral density, and systemic skeletal bone mineral density in premenopausal and post-menopausal

Indian women. *Menopause* 19, 642-649, 2012 (DOI: 10.1097/gme.0b013e31823dbbf7) (**Current Impact Factor: 3.758**).

33. Meenawat A, Punn K, Meenawat A, Maheshwari A. Periodontal disease and type I diabetes mellitus: Associations with glycemic control: An Indian perspective. *Diabetes Metabolic Syndrome - Clinical Research Reviews*. Published online on 26 March 2013.
34. Mishra G, Shaikh H. Prevalence of periodontal disease among engineering students in the Lucknow city (U.P.). *Journal of Indian Academy of Dental Specialists Researchers* 1(3):6-9, 2012.
35. Pasricha N, Gupta A, Nagar A, Bedi RS, Siddiqui MS. Human dental stem cells: A current perspective. *Indian J Bio Research* 81(4):1-8, 2012.
36. Pasricha N, Nagar A, Bedi RS, Gupta A, Punn K. Anatomical perspective of Eagle's Syndrome: Review and a case report. *Asian Journal Oral Health Allied Sciences* 2(1):35-39, 2012.
37. Raj N, Raj V, Aeram H. Interim palatal lift prosthesis as a constituent of multidisciplinary approach in the treatment of velopharyngeal incompetence. *J Adv Prosthodont* 4:243-247, 2012.
38. Rastogi A, Srivastava S. Digital impression. *Indian Dent J* 4:35-37, 2012.
39. Singh A, Kulshrestha R, Mathur A. Detection of a neutrophil chemotactic factor in Japanese encephalitis patients. *J Pharmaceut Sci Innov* 1(6):23-26, 2012.
40. Singh BP, Khan SA, Agarwal N, Siddharth R, Kumar L. Current biomedical waste management practices and cross-infection control procedures of dentists in India. *Internat Dent J* 62:111-116, 2012.
41. Singh Balendra Pratap, Tripathi Arvind, Singh MM & Singh SV, Evaluation of bone mineral density and testosterone levels on tooth loss – A Pilot Study, *Indian J. Stomatol.* 2012.
42. Singh Balendra Pratap, Pradhan Kedar Nath, Tripathi Arvind, Tua Reema and Tripathi Shuchi: Effect of sociodemographic variables on complete denture satisfaction. *J Adv Prosthodont*, 2012.
43. Singh D, Misra N, Agrawal S, Misra P. Angina Bullosa Haemorrhagica - A case report. *BMJ Case Rep* 2013 (doi: 10.1136/bcr-2012-008505).
44. Singh N, Agarwal S, Bhagchandani J, Chandra P, Gaur A. Painless anesthesia: A new approach. *J Dentofac Sci* 2(2):49-55, 2012.
45. Singh P, Singh A. Central giant cell granuloma of the maxilla: A case report and review of the literature. *GUIDENT* 5(12):75-77, 2012.
46. Singh R, Tripathi A, Singh JP, Singh GP, Singh T. Use of Custom Adapted Broderick Occlusal Plane Analyzer (BOPA) to a Hanau-H2 Articulator in Rehabilitation of a Complex Partial Edentulous Situation. *Asian J Oral Health Allied Sci* 2(1):49-54, 2012.
47. Singh R, Tripathi A, Singh GP, Singh SV. Full mouth rehabilitation of severely worn dentition: A case report. *J Int Coll Dent* 57(1):29-32, 2012.
48. Singhal P, Srivastava AK, Chopra J, Mahdi AA, Srivastava AK. Effect of electromagnetic radiation of mobile phone on sperm morphology in albino rats. *J Anat Sci* 20(2):58, 2012 (Abstract only).
49. Srivastava Akanksha, Aisa jalise, Tarun Kumar TA, G Kishore, Upadhya, P Nagaraja. Alginates a review of compositional aspects of Dental Applications Trends Biomater. *Artif. Organs* 26(1) 31-36; 2012
50. Srivastava Akanksha, BDS, Kishore Ginpalli MSc, PhD, Nagaraja Upadhya P, MSc, PhD, Nishant Bhat, MSc and Mamta Ballal, Msc, PhD. Manipal College of Dental Sciences, Manipal University, Manipal Karnataka, India. " Evaluation of the properties of a tissue conditioner containing organum oil as an antifungal additive" (*J Prosthet Dent* 2013; published online)
51. Srivastava S, Verma K, Chandra P, Agarwal S. Acrylic ball end clasp for retention of removable orthodontic appliances. *J Dentofac Sci* 1(2):37-38, 2012.
52. Srivastava Shitij Provisional natural pontic using fibre reinforced resin –a case report. *Indian Journal of Public Health Research and Development* Jan 2012; 1; 27-31
53. Srivastava Shitij Intraradicular splinting of horizontally fractured maxillary Central incisor –a case report. *Baba Fareed University Dental Journal* ;Oct 2012;2; 61-65.
54. Srivastava Shitij ,Abinav Sekhar ,Ajay Singh. Obstructive Sleep Apnea Syndrome- a conservative approach. *Indian Dental Journal* 2012; 4: 11-13

D. Popular science articles

55. Chana S, Mathur R, Singh MM. Metals in your denture – How safe? *Science Reporter* (NISCAIR, CSIR, New Delhi, India) 49, 53-57, 2012.

Papers Presented in Scientific Conferences

11th Indian Society of Periodontology, Post-Graduate Convention (Perioscope-2012: A Step Towards Future), Lucknow, 6-8 April 2012

Dr. Ashish Mathur: Autogenous bone grafts - The gold standard

Dr. Asmita: Assessment of furcation defect by cone beam computed tomography

Dr. Mahendra Mohan: Emerging nanotechnology in periodontics (Poster presentation)

Dr. Swyeta Jain Gupta: Novel therapeutic interventions targeted against *P. gingivalis*: An ingenious little bug (Poster presentation)

Dr. Rajesh Jhingran, Dr. GP Singh, Dr. Vivek Bains, Dr. Vivek Gupta, Dr. Rohit Madan: Attended

13th IACDE & IES Post Graduate Convention, Kasauli, 21-22 April 2012

Dr. Basit Hasan: Comparison of disinfection of Gutta-Percha cones using various disinfecting solutions

Dr. Pranab Mishra: Why extract when we can preserve

Dr. Aina Kumar, Dr. Sonal Sinha: Herbs in dentistry

10th National Triple 'O' Symposium on "Oral Mucosal Lesions", Sardar Patel Post-Graduate Institute of Dental and Medical Sciences, Lucknow, 14-15 July 2012

Gupta B, Chandra S, Kashyap B. Comparison of salivary flow and candidal carriage in patients with oral submucous fibrosis.

Madan M, Chandra S, Raj V, Kashyap B. Pericoronal radiolucency \neq dentigerous cyst.

Tewari B, Chandra S, Raj V. Study of habit pattern and oral mucosal changes in 1000 tobacco users.

Thahriani A, Chandra S, Raj V, Kashyap B, Rajguru JP. Cytomorphometric analysis of buccal mucosa of tobacco chewers.

Dr. Shaleen Chandra, Dr. Vineet Raj, Dr. Jagadish P Rajguru, Dr. Amit Thahriani, Dr. Mani Madan, Dr. Babusha Tewari, Dr. Bhavna Gupta: Attended

Dr. Prachi Anand, Dr. Suzanne Nethan: Orofacial manifestations of adverse drug reaction

14th IPS PG Convention, Mangalore, 28 July 2012

Dr. Ravi Gupta: Sleep Apnea Syndrome: A case report

Dr. Tanmay Srivastava: Impression Procedures in Maxillectomy Patients

X National Conference of Indian Association of Forensic Odontology on "Molecular Insights into Forensic Odontology", I.T.S. Centre for Dental Studies & Research, Ghaziabad, 7-9 Sept 2012

Dr. Babusha Tewari, Dr. Amritaksha Bhattacharya, Dr. Kehkasha Khan: Attended

37th National Annual Conference (PERIOWAVE), Indian Society of Periodontology, Shimla Hills, 12-14 October 2012

Dr. Mahendra Mohan: Efficacy of scaling and root planning on blood glucose level in uncontrolled diabetic patient: A myth or reality? - A case report

Dr. Sumit Kumar Agarwal: Recent vistas in periodontal therapy: New dimensions in treatment approach

Dr. Swati Das: Coequality of autoimmunity and periodontitis: An insight

X Scientific Symposium on "Oral Systemic Health" conducted by Colgate in association with Saraswati Dental College, Lucknow, 14 October 2012

Dr. GP Singh: Attended

XXI National Conference of IAOMP, Bambolim, Goa, 26-28 Oct 2012

Bhattacharya A, Chandra S, Kashyap B: Viral detection – Culture methods and its recent advances, p 179.

Garg KN, Raj V, Chandra S: Comparison of computer-assisted and manual analysis of AgNOR in oral leukoplakia, p 55.

Gupta B, Chandra S, Kashyap B: Comparison of salivary flow and candidal carriage in patients with oral submucous fibrosis, p 228.

Khan K, Chandra S, Raj V: Viral inclusion bodies – A review, p 179.

Madan M, Chandra S, Raj V: Cell proliferation in malignant and premalignant oral lesions, p 236.
Tewari B, Chandra S, Raj V: Study of habit pattern and oral mucosal changes in 1000 tobacco users, p 119.
Thahriani A, Chandra S, Kashyap B: Mast cells and angiogenesis in oral malignant and premalignant lesions, p 227.
Dr. Amit Thahriani, Dr. Mani Madan, Dr. Bhavna Gupta, Dr. Babusha Tiwari, Dr. Amritaksha Bhattacharya, Dr. Kahkasha Khan: Attended

26th FODI and 19th IES National Conference, New Delhi , 11 November 2012

Dr. Basit Hasan: The Efficacy of Hand Files, Rotary Files and Plastic Finishing Files in Removal Of Smear Layer From Root Canal Walls: A SEM evaluation

Dr. Pranab Mishra: What we leave behind

Dr. Aina Kumar: Nano dentistry trading into new horizon (Poster Presentation)

Dr. Sonal Sinha: Regeneration endodontics (Poster Presentation)

24th National Conference of Indian Academy of Oral Medicine and Radiology on “Current Concepts in Orofacial Imaging & Medicine”, Chandigarh, 23-25 Nov 2012

Dr. Suzanne Nethan, Dr. Deepika Narain: Go green -The emerging phytochemicals for oral disease

40th IPS PG Conference & 8th Biennial Meeting of Asian Academy of Prosthodontics Chennai, 5-9 Dec 2012

Dr. Ashutosh Gupta: Internet Resources in Prosthodontics

Dr. Mohd. Anwar: Biomechanical Consideration in Maxillectomy Patients

Dr. Vivek Gautam: Going beyond conventional impression techniques in Maxillectomy patients

Dr. Chhavi Trivedi, Dr. Kriti Madhok, Dr. Abhishek Katiyar: Hazards in Prosthodontics (Poster presentation)

Dr. Dewanshu Kumar, Dr. Maneesh Kr. Ranjan, Dr. Tahseen Fatima: Impression Techniques for highly resorbed ridges (Poster presentation)

12th Indian Society of Periodontology, PG Convention (PerioRang: Inspiring Vibrant Ideas), ITS Dental College, Hospital & Research Centre, Greater Noida, 1-3 March 2013

Dr. Mahendra Mohan: An interrelationship between Syndrome X and periodontal disease: A clinical research.

Dr. Swyeta Jain Gupta: The alacrity of Platelet Rich Fibrin in the treatment of fenestration defect: A case report

Dr. Sumit Kumar Agarwal: Gingival biotype and biological width assessment: A key determinant in tissue response to periodontal diseases.

Dr. Swati Das: Influence of smoking in dental hypersensitivity: A pilot study

Faculty Invited to Deliver Guest Lectures

| | |
|------------------|--|
| Dr. MS Raju | Ultrasound in dentistry, Rama Dental College, Hospital and Research Centre, Kanpur, 23 Feb 2013 |
| Dr. GP Singh | Oral care and effect of periodontal disease on general health, Air Force Station, Bakshi Ka Talab, Lucknow, 13 July 2012 |
| Dr. GP Singh | Relationship of periodontal diseases with systemic health, Colgate Palmolive Lecture, Saraswati Dental College, Lucknow, 14 Dec 2012 |
| Dr. Neeraj Kumar | Importance of working length, IDA, Jaunpur, 19 May, 2012 |

CDEs, CMEs, Workshops, Training Programs, Lectures, Seminars attended

- **CDE on “New Vistas in Orthodontics: Ortho-Perio relationship”, Career Institute of Dental Sciences & Hospital, Lucknow, 05 April 2012**
Dr. Ragni Tandon, Dr. Pratik Chandra, Dr. Manoj Sharma
- **CDE on “Myofunctional Appliances”, Career Institute of Dental Sciences & Hospital, Lucknow, 05 April 2012**
Dr. Ashish Goel, Dr. Madhvi Bhardwaj
- **Workshop on Functional Appliances by Dr. OP Kharbanda, Career Institute of Dental Sciences & Hospital, Lucknow, Accredited Workshop by UP State Dental Association, 05 April 2012**
Dr. Ashish Goel
- **CDE and Workshop on “DNA isolation from dental pulp & computerized bite mark analysis”, National Forensic Odontology, UP Chapter of IAFO, CSMMU, Lucknow, 27-28 April 2012**
Dr. RS Bedi, Dr. Sridhar Reddy, Dr. Nimish Gupta

Dr. Shaleen Chandra, Dr. Vineet Raj, Dr. Bina Kashyap, Dr. Jagdish Rajguru, Dr. Nidhi Dwivedi, Dr. Ruby Dwivedi, Dr. Amit Thahriani, Dr. Mani Madan, Dr. Babusha Tewari, Dr. Bhavna Gupta

Dr. Seema Malhotra
- **CDE on “New vistas in dental caries”, BBD College of Dental Sciences, Babu Banarasi Das University, Lucknow, 30 April - 01 May 2012**
Dr. Meenakshi Upadhyay, Dr. Neha Saxena, Dr. Priyamvada Kulshreshtha,
Dr. Sankalp Rohatgi
Dr. Suleman Abbas Khan, Dr. Seema Malhotra
Dr. Atul Jain, Dr. Sanjeev Srivastava
- **Hands on preparation course Ivoclar Vivadent with Dr. Sachindeep Singh, Comfort Inn, Lucknow, 26 May 2012**
Dr. Sansriti Narain
- **Lecture on “Second generation amine fluoride in the management of dentinal hypersensitivity pain management” delivered by Dr. Eyl Sedarat at Piccadilly Hotel, Lucknow, 21 June 2012**
Dr. Apurva K Srivastava
- **Workshop on “Immunohistochemistry staining protocol”, Sardar Patel Post-Graduate Institute of Dental & Medical Sciences, Lucknow, 13 July 2012**
Dr. Bhavana Gupta, Dr. Babusha Tewari, Dr. Amritaksha Bhattacharya, Dr. Kehkasha Khan
- **Triple O Conference, Sardar Patel Post-Graduate Institute of Medical Sciences, Lucknow, 15 July 2012**
Dr. RS Bedi, Dr. Poonam Goel, Dr. Karan Punn
- **CME on “Health hazards of tobacco and tobacco cessation”, organised by Indian Chest Society & Association Of Dental Surgeons, KGMU, Lucknow, 18 Aug 2012**
Dr. Apurva K Srivastava, Dr. Digwijay Singh

Dr. Vineet Raj: Role of dentist in diagnosing tobacco related lesions, their treatment, and cessation of habit
Dr. Amit Thahriani, Dr. Mani Madan, Dr. Bhavana Gupta, Dr. Amritaksha Bhattacharya, Dr. Kehkasha: Attended
Dr. Ashutosh Gupta

- **CDE on “Research methodology in dental sciences” held at BBD College of Dental Sciences, Babu Banarasi Das University, Lucknow, 08 Sept 2012**

Dr. GP Singh, Dr Asmita, Dr. Mahendra Mohan, Dr. Swyeta Jain Gupta, Dr. Sumit Kumar Agarwal, Dr Swati Das

Dr. Rachana Bahuguna, Dr. Suleman Abbas Khan

Dr. Priya Singh, Dr. Rakhi Issrani, Dr. Prachi Anand, Dr. Suzzane Nethan, Dr. Deepika Narain
Dr. Vineet Raj, Dr. Jagadish P Rajguru, Dr. Nidhi Dwivedi, Dr. Bhavana Gupta

- **Early orthodontics with focus on management of developing Class III malocclusion in child patients organised by Academy of Pedodontics, U.P. Chapter held at BBD College of Dental Sciences, Babu Banarasi Das University, Lucknow, 23 Sept 2012**

Dr. Rachana Bahuguna, Dr. Suleman Abbas Khan, Dr. Seema Malhotra, Dr. Sansriti Narain, Dr. Nitin Singh

- **CDE on “Improved aesthetics with implants & immediate loading with prosthetic options”, 29 Sept 2012**

Dr. Ashutosh Gupta

- **History of Science Seminar on “Evolution of Medical Traditions” jointly organized by INSA and NASI (Lucknow Chapter), Biotech Park and CSIR Laboratories, Lucknow, Biotech Park, Lucknow, 14-16 Oct 2012**

Dr. Asha Mathur

- **47th Indian Orthodontic Society (IOS) Conference & 8th Asia Pacific Orthodontic Conference (APOC), New Delhi, 29 Nov 2012**

Dr Ragni Tandon, Dr Ashish Goel, Dr Pratik Chandra

- **CDE on “Oral Cancer”, World Cancer Day, Dental Faculty, KGMU, Lucknow, 04 Feb 2013**

Dr. JS Kesave, Dr. Suyash Agarwal

- **CDE on “Diagnostic dilemma”, Subharti Dental College, Meerut, 15 Feb 2013**

Dr. Prachi Anand, Dr. Suzzane Nethan, Dr. Deepika Narain: Attended

- **17th Indian Orthodontic Society (IOS) PG Convention, 28 Feb - 03 Mar 2013, Mangalore**

Dr Ashish Goel

Honours, Awards & Special Attainments

A. Faculty

- Dr. Ashish Goel** Best Overall Performer of the Year, Saraswati Dental College, Lucknow, 16 July 2012
Associate Editor, Journal of Dentofacial Sciences
- Dr. Rakhi Issrani** Dr. AL Bhoweer Gold Medal for securing Highest marks in Master of Dental Surgery in Oral Medicine & Radiology, KLE University, Belgaum in Examination held in May 2012
Certificate of Distinction in Master of Dental Surgery in Oral Medicine & Radiology, KLE University, Belgaum in Examination held in May 2012
- Dr. Kapil Loomba** Elected President, Indian Endodontic Society
Cited in Quintessence Book of Conservative Dentistry- Fracture of Tooth-Classification- 2012 by Vimal Sikri
- Dr. Ashok K Srivastava** Visiting Professor of Anatomy, TEXILA AMERICAN UNIVERSITY, GUYANA, SOUTH AMERICA, 01 Oct 2012 to 21 Feb 2013
Nominated Member, Education Council, UP GOVT. & District Deputy Secretary, Health Protection, Human Right Association of India
- Dr. Shrish C Srivastava** Second prize in Art Competition held at Saraswati Dental College, Lucknow, 16 July 2012
- Dr. Ragini Tandon** Chaired Scientific Session at 47th Indian Orthodontic Society (IOS) Conference & 8th Asia Pacific Orthodontic Conference (APOC), 29 Nov 2012, New Delhi
Appointed Advisor, Organising Committee of 18th PG Convention to be held at Meerut in 2014
- Dr. Arvind Tripathi** Best Professor Award, Saraswati Dental College, Lucknow, August 2012

B. PG Students

- Dr. Manoj Yadav** Second Prize in Quiz Competition on 'Basic Life Support', Sardar Patel Post-Graduate Institute of Medical Sciences, Lucknow, 27 Sept 2012
- Dr. Upasana Khemka** Second Prize in Paper Presentation on 'The use of TMJ (native) disk as an interpositional graft in the treatment of TMJ ankylosis', COSMOS-International Conference for ENT Surgeons, Oral & Maxillofacial Surgeons & Plastic Surgeons, Mangalore, 1-2 Feb 2013
- Dr. Gauri Pande** First Prize in Paper Presentation on 'Teledentistry', Impressions-2013, Saraswati Dental College & Hospital, Lucknow, 18 Feb 2013
- Dr. Annuradha Dey** Second Prize in Paper Presentation on 'Teledentistry', Impressions-2013, Saraswati Dental College & Hospital, Lucknow, 18 Feb 2013



Section II

Departmental Achievements

A. Dental Sciences

Department of Conservative Dentistry

The Staff

Professors

Dr. Kapil Loomba, M.D.S., *Head of the Department*

Dr. Atul Jain, M.D.S.

Dr. Sanjeev Srivastava, M.D.S.



Dr. Kapil Loomba

Readers

Dr. Piyush Raturi, MDS

Dr. Neeraj Kumar, M.D.S.

Senior Lecturers

Dr. Abhinav Singh, M.D.S.

Dr. Kavita Verma, M.D.S.

Lecturers

Dr. Anjali Seth, B.D.S.

Dr. Alisha Chandan, B.D.S.

The Charter

The Department of Conservative Dentistry deals with the diagnosis, treatment and prognosis of defects of teeth that do not require full coverage restorations for correction which results in the restoration of proper tooth form, function and esthetics while maintaining the physiologic integrity of the teeth in harmonious relationship with the adjacent hard and soft tissues. The scope and the arena of this Department include the treatment provided by fillings in the form of, Silver Amalgam, Composite, Glass Ionomer Cement and Direct Filling Gold. The teeth which cannot be restored by conventional means are restored by putting metallic inlay, onlay, crowns which will be metal ceramic or all ceramic. The management of teeth which are infected is undertaken by providing state of art Root Canal Treatment and, if need be, then surgical intervention is done. By far, the endeavor is to conserve all teeth including, if possible, the so called wisdom teeth, giving them not only functional support but providing esthetically pleasing and effective smile line. For this, veneering, bleaching and all ceramic work is also undertaken.

The department is equipped with advanced dental chairs, dental equipments, microscope, intra-oral radiographic machines including radiovisiography with digital printer and sophisticated methods for sterilization of instruments so as to render quality care and well being of the patients.

The department offers three year post-graduate programme in addition to under-graduate teaching as per DCI norms and endeavors to provide adequate knowledge, necessary skills and reasonable attitude for carrying out activities appropriate for dental practice. The students are exposed to a wide range of dental problems to get extensive clinical experience.

The faculty members are assigned the responsibility to guide final year students with their quota assigned by the DCI, periodically assess the students theoretically and clinically, keep record of the follow-up and research projects undergoing in the department, guide the interns to fulfill quota assigned by the DCI, conduct seminars and supervise project work of the Interns.

Ongoing research projects

A. Faculty

Development of latest electronic apex locator

Principal Investigator: Dr. Neeraj Kumar

Co-Investigator: Dr. Kapil Loomba

B. Dissertation of M.D.S. Students

Dr. Sonal Sinha

The effect of root canal taper on the removal of smear layer & debris, using different irrigating solutions: A scanning electron microscope study

Supervisor: Prof. Kapil Loomba

Co-Supervisors: Dr. Atul Jain, Dr. Rhythm Bains, Dr. Abhinav Singh

Dr. Aina Kumar

The role of time period on the effectiveness of chelating agents: A scanning electron microscope study

Supervisor: Prof. Kapil Loomba

Co-Supervisors: Dr. Atul Jain, Dr. Rhythm Bains, Dr. Abhinav Singh

Dr. Anamika Parashar

Antimicrobial evaluation of a new bioactive cement: An in vitro study

Supervisor: Prof. Kapil Loomba

Co-Supervisors: Dr. Sanjeev Srivastava, Dr. TN Shole, Dr. Rhythm Bains, Dr. Abhinav Singh

Dr. Mohit Miglani

Sealing Ability of new bioactive cement for perforation repair: An in vitro evaluation

Supervisor: Prof. Kapil Loomba

Co-Supervisors: Dr. Sanjeev Srivastava, Dr. Rhythm Bains, Dr. Abhinav Singh

Dr. Rahul Srivastava

An in vitro comparison propolis and antibiotics containing intracanal medicament against *E. faecales*

Supervisor: Prof. Kapil Loomba

Co-Supervisors: Dr. Sanjeev Srivastava, Dr. Jyotsana Agarwal, Dr. Rhythm Bains, Dr. Neeraj Kumar

Dr. Sameena Tabassum

An in vitro comparison of quantitative dissolution of human pulp tissue in different irrigating solutions

Supervisor: Prof. Atul Jain

Co-Supervisors: Dr. Piyush Raturi, Dr. Neeraj Kumar, Dr. Kavita Verma

Dr. Salwa Zafar

Root canal morphology of mandibular third molars - A stereomicroscopic study

Supervisor: Prof. Atul Jain

Co-Supervisors: Dr. Piyush Raturi, Dr. Neeraj Kumar, Dr. Kavita Verma

Dr. Vivek Rai

Evaluation of antimicrobial efficacy of herbal alternatives against *Enterococcus faecalis* as root canal irrigants: An ex vivo study.

Supervisor: Prof. Sanjeev Srivastava

Co-Supervisors: Prof. Kapil Loomba, Dr. Prashant Gupta, Dr. Rhythm Bains, Dr. Abhinav Singh.

M.D.S. Dissertation submitted

Dr. Pranab Mishra

The effect of different vehicles and delivery techniques on calcium ion release and its pH: An in – vitro study

Supervisor: Prof. Kapil Loomba

Co-Supervisors: Dr. Rhythm Bains, Dr. Abhinav Singh, Dr. VP Sharma, Dr. RC Murthy, Dr. Rakesh Kumar

Dr. Basit Hasan

Comparison of the efficacy of hand files, rotary files and plastic finishing files in removal of smear layer from root canal walls: A SEM evaluation

Supervisor: Prof. Kapil Loomba

Co-Supervisors: Dr. Rhythm Bains, Dr. Abhinav Singh.

M.D.S. Degree awarded

Dr. Tarun V Srivastava

Ex vivo evaluation of root canal wall thickness after canal preparation with landed and non landed rotary instruments with or without the chelating agents: A direct digital radiographic analysis

Supervisor: (Prof. T K Gaur

Dr. Namrata Agarwal

Valuation of surface characteristics of used and new nickel- titanium rotary instruments: An atomic force microscope study

Supervisor: Prof. Kapil Loomba

Membership of Scientific Societies, Committees etc.

| <u>Name</u> | <u>Membership details</u> |
|------------------------|---|
| Dr. Kapil Loomba | Fellow, Pierre Fauchard Academy Internatinal, France Member, Executive Committee, Federation of Operative Dentistry of India Member, Indian Endodontic Society Member, Indian Dental Association, Lucknow Branch Member, Indian Association of Conservative Dentistry and Endodontics Member, DCI (up to May 2012) Member, Journal & PG Review Committee, DCI |
| Dr. Sanjeev Srivastava | Member, Federation of Operative Dentistry India Member, Indian Endodontics Society Member, Indian Society of Prosthodontics, Restorative & Periodontics Dentist Member, Academy of Laser Dentistry Member, Indian Dental Association, Lucknow Branch |
| Dr. Rhythm Bains | Member, Federation of Operative Dentistry of India Member, Indian Dental Association, Lucknow Branch |
| Dr. Abhinav Singh | Member, Federation of Operative Dentistry of India |
| Dr. Kavita Verma | Member, Indian Endodontic Society |

Brief write-up of published papers

MTA-based root canal sealers

Rawatia M, Verma K, Singh S., Munuga S., Khan S. J Orofac Res 3(1):16-21, 2013

Mineral trioxide aggregate (MTA) has been recommended for pulp capping, pulpotomy, apical barrier formation in teeth with open apices, repair of root perforation and root canal obturation. Since, its introduction in 1993 by Torabinejad numerous studies have been published regarding various aspects of this material. The aim of this review was to consider MTA as root canal sealer and various laboratory experiments and clinical studies of MTA-based root canal sealers. An extensive search of the endodontic literature was made to identify publications related to MTA-based root canal sealers. The articles were assessed for the outcome of laboratory and clinical studies on their biological properties and physical characteristics. Comparative studies with other sealers were also considered. Several studies were evaluated covering different properties of MTA-based sealers including physical properties, biocompatibility, leakage, adhesion, solubility, antibacterial properties and periapical healing effect. Comparative studies reveal their mild cytotoxicity but their antibacterial effects are variable. Further research is required to establish the role of MTA as root canal sealers.

Medicinal Plant in the treatment of dental caries

Kabra P, Loomba K, Kabra SK, DSP Majumdar, Kumar N. Asian J Oral Health Allied Sci 2(1):12-16, 2012

This article brings an insight of known medicinal plants helpful in treatment of dental caries and thus a novel approach towards preventive oral care. Dental caries, one of the globally affecting diseases of the oral cavity is still prevalent in

today's era despite knowledge of most advanced sciences and technologies in dental practice. There has been constant effort to focus on interception and correction of this disease entity but today our horizon has broadened the approach and goal remains to prevent the disease process rather than to correct it. Medicinal plants have been documented for prevention and cure of many systemic diseases since ancient times. With advancement in science and scientific procedures it is now known that plants have potential curative action for oral diseases such as dental caries. The usage of these herbal extracts in clinical practice can miraculously benefit the overall health of the patient. With complete understanding of the dental caries, our approach should be based on prevention of disease process on way to attain it is "going herbal".

Dens invaginatus: review, relevance, and report of 3 cases

Khan SA, Khan SY, Bains VK, Bains R, Loomba K. J Dent Child 79(3):143-153, 2012

Dens invaginatus is a rare developmental morphoanatomical variation resulting from the infolding of the dental papilla before biological mineralization that allows the invagination of inner dental epithelium. Permanent maxillary lateral incisors are most commonly affected, and the condition is frequently bilateral, but it may also prevail in permanent maxillary central incisors. The purpose of this paper was to provide an overview of the etiopathogenesis, frequency of occurrence, and clinical and radiographic features and to discuss 3 dens invaginatus cases.

Veneer in restorative dentistry

Kumar N, Srivastava S, Majumdar D, Loomba K. Asian J Oral Health Allied Sci 2(1):17-25, 2012

The study was aimed to discuss the development of veneering system from initial porcelain to composite resin and ultimately to cad-cam system. The demand for the tooth color restorations and a more attractive smile has now passed the boundaries of exclusive practitioners, specialist and the esthetic centers to all over the world. As esthetically pleasing restorations of young fractured malformed or discolored teeth has been a perplexing problem for dentist, in past few years a conservative approach to improve the esthetic appearance has led to widespread use of the veneering system. Typically, veneers are made of chair side composite, processed composite, porcelain, or cast ceramic materials. This review article discusses the indications, contraindications and development of veneering system over the years.

Mineral Trioxide Aggregate (MTA): A hope for root fracture

Kumar N, Bains R, Loomba K, Jain A. Asian J Oral Health Allied Sci 2(1):55-58, 2012

Aim to present clinical application of MTA, as a bioactive apical barrier in fracture of apical 1/3rd of root. A 21 year old female visited Department of Endodontics with complaint of pain, swelling and pus discharge since last four months from her upper front tooth. Patient had a history of trauma one year back and tooth 11 was non-vital, discoloured, with Ellis class III (Loomba et al. Type I, Div 3) fracture and deep periodontal pocket. Radiographic assessment revealed root fracture in apical 1/3rd with wide root canal in 11 and severe bone loss. Endodontic treatment was instituted wherein apical fracture portion acted as apical barrier for reconstructing the outer shape of apical root and facilitates the adaptation and condensation of MTA and finally obturating with custom made rolled cone gutta-percha technique.

Tissue engineering and its application in Endodontics: An overview

Loomba K, Bains R, Bains VK, Loomba A, Nadig R, Shrivastava TV. Endodont Prac Today 6(2):105-112, 2012

The study was aimed to gain an overview of the basic concept of tissue engineering, which helps in understanding its potential application and scope in the field of clinical endodontic practice. The accepted use of regenerative therapy in the field of Endodontics can be designed to restore and replace lost dentine, pulp, cementum and periodontal tissues. The key elements of tissue engineering are the stem cells or units, the signals or growth factors/morphogens (GFs), and a carrier or scaffold of extracellular matrix. The dental pulp has been identified as a source of mesenchymal stem cells, which by definition are adult multipotent stem cells that are capable of differentiating into mesenchymal and non-mesenchymal tissues, such as fat, bone, cartilage and neural cells. The pulp from extracted third molars, teeth extracted for orthodontic or periodontal reasons or supernumerary teeth offer a valuable source of stem cells for research. Autologous dental pulp stem cells may be frequently used for pulp regeneration. Induced pluripotent stem cells, which are artificially derived through stem cell gene transfer into an adult stem cell, may have the potential to be utilised as an alternative source for autologous pulp tissue regeneration.

Assessment of gingival microvasculature changes in young diabetic patient and its correlation with systemic complication

Agarwal N, Srivastava SK, Bathi RJ, Ahuja P. J Indian Acad Oral Med Radiol 23(4):163-167, 2012

Diabetes mellitus is a clinical syndrome characterized by hyperglycemia due to absolute or relative deficiency of insulin. The microvasculature complications of diabetes include retinopathy, nephropathy and neuropathy. Gingival microvasculature represents vascular changes elsewhere in the body and hence gingival biopsies may be subjected for microscopic analysis to evaluate the microvasculature changes in diabetic patients. The present study aims at demonstrating microvasculature changes in gingival of diabetics and analyze its correlation with systemic complications of diabetes. A total of 46 outpatients with known diabetes between the age group of 10 and 35 years, were included in the study. A total of 40 control subjects (20males and 20 females) were also selected gingival biopsies were performed, specimens were stained and visualized under the microscope to assess the microvasculature changes in diabetic patients. Signs of microangiopathy were prominent in diabetics. A total of 16 specimens (34.8%) showed widening and re duplication of basement membrane, 33 specimens (71.7%) had increased staining in basement membrane, 9 (19.6%) showed splitting of basement membrane, 26, (60.9%) had swelling of endothelial cells and 5 (10.9%) showed proliferation of endothelial cells with or without lumen obliteration. Out of the 46 diabetic subjects, grade I microangiopathy was seen in 33 subjects, grade II in seven subjects and grade III in six subjects. Retinopathy was present in five subjects, all with uncontrolled diabetes, nephropathy was present in 22 subjects out of which (90.9%) were uncontrolled diabetics and neuropathy was seen in 23 subjects out of which (86.9%) were uncontrolled diabetics.

Management of pulpal floor perforation and grade II fraction involvement using MTA and platelet rich fibrin: A clinical report

Bains R, Bains VK, Loomba K, Verma K, Nasir A. *Contemp Clin Dent* 3(2):S223-S227, 2012

This study reports the management of an iatrogenic perforation of pulpal floor in the furcation of mandibular first molar, using Mineral Trioxide Aggregate (MTA) and platelet rich fibrin (PRF). Unpredictable endodontic root/pulp chamber floor perforations resulting in unacceptable high rate of clinical failure has now been a lesser threat with the advent of new technologies and biocompatible materials that utilize the applications of basic research along with tissue engineering concept in clinical practice. Present case report illustrates the use of MTA and platelet rich fibrin (PRF) for the repair of the perforation defect and regeneration of the lost peridontium in furcation area. Although, histologic events and reaction of MTA with PRF is not studied so far, however, the autologous and biocompatible nature of the components used for present treatment modalities seems to be beneficial for the long term clinical results obtained in our case.

Management of a dentigerous cyst in a medically compromised geriatric patient: A case report

Loomba A, Loomba K, Bains R, Bains VK. *Gerodontology* 29:1190-1194, 2012

Because of the increasing number of older persons seeking dental care, the growing trend towards a longer dental appointment and increased administration of drugs in dentistry, the possibility of occurrence of medical emergencies in dental offices has shown an upward trend. This case report discusses enucleation of a central dentigerous cyst in a 72-year old male on long-term low dose aspirin therapy. Surgical removal of impacted tooth with total enucleation of cystic lesion was performed in the dental chair under 2% lidocaine with 1:200,000 adrenaline, 3 days after aspirin cessation. After complete debridement of the surgical site, the wound was sutured and a gauze saturated with 10% tranexamic acid was placed on surgical site for 30 minutes. No post-operative complications or bleeding was seen on subsequent appointment and healing was normal. A geriatric and medically compromised patient demands special care and attention; and the decision to cease aspirin before surgery or not is of critical importance.

Acrylic ball end clasp for retention of removable orthodontic appliances

Srivastava S, Verma K, Chandra P, Agarwal S. *J Dentofac Sci* 1(2):37-38, 2012

There are numerous design of clasp which are used for providing retention to the removable appliances. In case additional retention is required secondary clasps are incorporated in the design. In this article a modified ball end clasp had been suggested which is very simple fabricate and repair. This clinical innovation is a small effort to boost the neglected research in the field of removable appliances.

Department of Oral & Maxillofacial Surgery

The Staff

Professors

Dr. RS Bedi, M.D.S., *Head of the Department*

Dr. Sumanth Garud, M.D.S.

Dr. LC Gupta, M.D.S.



Dr. R.S. Bedi

Readers

Dr. Samta Goyal, M.D.S.

Dr. JS Kesave, M.D.S.

Dr. Poonam Goel M.D.S.

Senior Lecturers

Dr. Nimish Gupta, M.D.S.

Dr. Vidya KC, M.D.S.

Dr. Karan Punn, M.D.S.

Dr. Suyash Agarwal, M.D.S.

Dr. Jagbir Singh Salooja, M.D.S.

The Charter

The Department deals with the academic and clinical activities related to oral and maxillofacial surgery in addition to research work. The academic activities involve teaching programme for undergraduate (third and final year) and postgraduate students. At the postgraduate level the Department is involved in imparting comprehensive knowledge of the speciality subject i.e., oral surgery and craniomaxillofacial surgery, in addition awareness on basic subjects like anatomy, embryology, biochemistry, physiology, pathology, pharmacology, general surgery and general medicine etc.

At clinical level, Department is equipped with latest state of art equipment. The faculty in the Department is well trained and experienced to perform major and minor maxillofacial surgical procedures. Faculty routinely performs minor oral surgical procedures which include simple extractions, surgical extractions, apicectomies, dental implant insertion and sinus lift procedures, cyst enucleations, incision and drainage, biopsies and neurectomies etc. Major maxillofacial surgical procedures which are routinely performed are for management of conditions like polytrauma, temporomandibular joint diseases, cleft lip and palate cryosurgical treatment of soft tissue lesions orthognathic surgeries, facial esthetic procedures head & neck oncosurgeries, resection and reconstruction procedures etc. The Department is looking forward to incorporate laser and operating light mounted CCTV cameras in the Department armamentarium.

The Department also trains undergraduate students clinically to perform minor surgical procedures and postgraduate students to perform minor surgeries and assist and perform major maxillofacial surgical procedures.

Ongoing research projects

A. Faculty

Changes in sleep pattern in relation to salivary melatonin levels in patients of oral cancer

Principal Investigator: Dr. RS Bedi

Co-Investigator: Dr. Man Mohan Singh, Dr. Sangeeta Rani, Dr. Shalie Malik (Lucknow University)

Summary: The daily oscillations in various biological processes known as circadian rhythms are regulated by an endogenous clock and it has been found that that disruption of these rhythms has been associated with certain cancers in humans. For example, cell proliferation which is regulated by circadian rhythm shows asynchrony in malignant tissues. Such circadian system alterations are not only a risk factor for tumour incidence, but accelerate the progression of existing tumours. The available literature on human and animal models for cancer suggests that

circadian regulation may be an important prerequisite for the maintenance of host defenses against cancer. Rhythms such as sleep wake cycle and that of melatonin has been found to be most significantly altered in patients with large tumour burden. Therefore, in the present proposal we intend to study changes in sleep-wake pattern in relation to salivary melatonin levels in patients of oral cancer.

Comparison of efficacy of Haridra extract and other conventional medicinal therapies in the management of Grade I & II Oral Submucous fibrosis

Principal Investigator: Dr. RS Bedi

Co-Investigator: Dr. Karan Punn

Summary: This study is being conducted for comparison of the efficacy of extract of Haridra in group I and conventional medicinal therapies (antioxidants, Vitamins and topical steroids) in group II patients suffering from Grade I and Grade II Oral Submucous Fibrosis. This study will evaluate the clinical response of Oral Submucous Fibrosis to both the modalities.

B. Dissertation of M.D.S. students

Dr. Upasana Khemka

Versatility of buccal fat pad in buccal mucosal lesions

Supervisor: Dr. RS Bedi

Co-Supervisors: Dr. LC Gupta, Dr. Poonam Goel

Dr. Manoj Yadav

Comparison of cryosurgery versus laser surgery in premalignant lesions of oral and maxillofacial region

Supervisor: Dr. RS Bedi

Co-Supervisors: Dr. LC Gupta, Dr. JS Kesave

Dr. Zeeshan Khan

Efficacy of Manuka honey in intraoral wound healing

Supervisor: Dr. Sumanth Garud

Co-Supervisors: Dr. JS Kesave, Dr. Poonam Goel

Dr. Jaipal Singh

Clinical and radiographic comparison of iliac crest graft versus porous high density polyethylene graft in mandibular reconstruction

Supervisor: Dr. RS Bedi

Co-Supervisors: Dr. Poonam Goel, Dr. Samta Goyal

Dr. Nivedita Chauhan

Evaluation of bone healing by ultrasonography, Color Doppler and radiograph after apicoectomy with or without graft

Supervisor: Dr. RS Bedi

Co-Supervisors: Dr. JS Kesave, Dr. Poonam Goel

Dr. Annuradha Dey

Evaluation of island osteoperiosteal flap for alveolar ridge augmentation

Supervisor: Dr. Sumanth Garud

Co-Supervisor: Dr. L.C Gupta, Dr. JS Kesave

Dr. Gauri Pande

Clinical and radiographic evaluation of sinus lift without graft and sinus lift technique using PRF as a sole grafting material

Supervisor: Dr. R.S Bedi

Co-Supervisors: Dr. LC Gupta, Dr. JS Kesave

C. M.D.S. Thesis submitted

Dr. Amrendra Kumar

Use of Platelet Rich Fibrin in post-surgical jaw defect

Supervisor: Dr. RS Bedi

Co-Supervisors: Dr. JS Kesave, Dr. Poonam Goel

Dr. Amol Santosh Hedao

Clinical prediction of translation of microflora from tooth to osteointegrated implant

Supervisor: Dr. LC Gupta

Co-Supervisors: Dr. RS Bedi, Dr. GP Singh, Dr. Asha Mathur

D. M.D.S. Degree awarded

Dr. Suyash Agarwal

Role of ultrasonography and color Doppler in lesions of maxillofacial region

Supervisor: Dr. Munish Kohli

Co-Supervisors: Dr. Shadab Mohammed, Dr. RK Singh, Dr. LC Gupta

Dr. Karan Punn

Comparative evaluation of various treatment modalities in OSMF

Supervisor: Dr. RS Bedi

Co-Supervisors: Dr. RS Dolas, Dr. LC Gupta

Dr. Priyamvada

Efficacy of bioresorbable plates in treatment of fractures in maxillofacial region

Supervisor: Dr. LC Gupta

Co-Supervisors: Dr. RS Dolas, Dr. RS Bedi

Membership of Scientific Societies, Committees etc.

Name

Membership details

| | |
|-------------------|--|
| Prof. RS Bedi | Life Member, Indian Association of Oral and Maxillofacial Surgeons Member, Life Member, Indian Dental Association |
| Dr. Koyena Mishra | Life Member, Indian Association of Oral and Maxillofacial Surgeons |
| Dr. Sumanth Garud | Life Member, Indian Association of Oral and Maxillofacial Surgeons |
| Dr. JS Kesave | Life Member, Indian Association of Oral and Maxillofacial Surgeons Member,, St. Lucia Medical & Dental Council, (West Indies) |
| Dr. Samta Goyal | Life Member, Indian Association of Oral and Maxillofacial Surgeons |
| Dr. Poonam Goel | Life Member, Indian Association of Oral and Maxillofacial Surgeons |

Brief write-up of published papers

Intellectual Property Rights (IPR) and obtaining a patent: Indian scenario

Kesave JS, Gupta N, Bedi RS. Asian Journal Oral Health Allied Sciences 2(1):8-11, 2012

Research and research associated business is taking a good shape in India from the last few years. Clinicians and research personnel are becoming increasingly in need to have comprehensive understanding of guidelines and frameworks of intellectual property rights in their own country and also about the condition and systems prevailing at

international level to be competitive and to remain relevant in an increasing globalized economy. Intellectual property rights are legal rights of institutions and individual researchers who involve in invention and innovation. This article gives an overall understanding about IPR and to gain knowledge about current patent system in India.

Multidisciplinary team management of cleft lip and palate: An Indian perspective

Kesave JS, Punn K, Bedi RS. Asian Journal Oral Health Allied Sciences 2(1):59-62, 2012

Cleft lip and palate is a relatively common craniofacial anomaly affects physical, psychological and social aspects of cleft child and his or her parents, and as such necessitates a multidisciplinary team for managing the complexities associated with the deformity. The counseling should normally begin during prenatal period and help with feeding. The deformed speech also necessitates nasendoscopy which may be required during adolescence and immediate post adolescence period to plan skeletal corrective orthognathic surgery. In order to deliver complex care a specialized team of experts is required to maintain the treatment from infancy to late adolescence period.

Periodontal disease and type I diabetes mellitus: Associations with glycemic control: An Indian perspective

Meenawat A, Punn K, Meenawat A, Maheshwari A. Diabetes Metabolic Syndrome - Clinical Research Reviews. Published online on 26 March 2013

Periodontal diseases have close association with many systemic conditions including diabetes mellitus. This article deals with the comparative analysis of periodontal parameters (plaque index, bleeding index, pocket depth and attachment loss) in a group of diabetic patient v/s a group of non-diabetic patient where statistical analysis was performed to evaluate the relationship between periodontal parameters and degree of metabolic control, the duration of the disease and the appearance of complication. The outcome of the study concluded that patients with type I diabetes have increased periodontal disease susceptibility. Periodontal inflammation is greatly increased in subjects with longer disease course, poor metabolic control and diabetic complications.

Human dental stem cells: A current perspective

Pasricha N, Gupta A, Nagar A, Bedi RS, Siddiqui MS. Indian J Bio Research 81(4):1-8, 2012

Stem cells represent natural units of embryonic development and tissue regeneration. The potential of stem cells to treat devastating diseases has been hailed as one of the greatest medical breakthroughs of all time. Research on stem cells is advancing knowledge about how an organism develops from a single cell and how healthy cells replace damaged cells in adult organism. This promising area of science is also leading scientists to investigate the possibility of cell based therapies to treat disease, which is often referred to as regenerative or reparative medicine. Although our understanding of the molecular pathways underlying mesenchymal stem cell differentiation is expanding, translation of this knowledge into tissue engineering strategies remains in its infancy. In the context of orofacial tissue engineering, populations of stem cells that form bone, cementum, dentin and even periodontal ligament have been identified. This has unlocked a new direction of research to restore the form and function of the oral cavity using autologous cells, thereby preventing histocompatibility mismatch and transmission of disease.

Anatomical perspective of Eagle's Syndrome: Review and a case report

Pasricha N, Nagar A, Bedi RS, Gupta A, Punn K. Asian Journal Oral Health Allied Sciences 2(1):35-39, 2012

Eagle Syndrome is a rare entity which is not commonly suspected in clinical practice, and only a small percentage of the population believed to have an elongated styloid process and a calcified styloid ligament manifest the symptoms. It may develop inflammatory changes or impinge on the adjacent arteries or sensory nerve endings. A large spectrum of signs and symptoms has been mentioned in various reports for eagle syndrome. Diagnosis can be made with careful clinical evaluation and confirmed with radiographs showing an elongated styloid process or mineralization of the styloid complex.

Department of Oral Medicine & Radiology

The Staff

Professors

Dr. M Srinivasa Raju, M.D.S., *Head of the Department*



Dr. M.S. Raju

Readers

Dr. NC Sangamesh, M.D.S.

Senior Lecturers

Dr. Priya Singh, M.D.S.

Dr. Rakhi Issrani, M.D.S.

Dr. Dipti Singh, M.D.S.

Lecturers

Dr. Saurabh Mathur, B.D.S.

The Charter

The Department of Oral Medicine and Radiology deals with the health and diseases of the oral and para-oral structures. This is the department where the patient is first received and elaborate general and medical history of the patient is taken followed by thorough examination and investigations for disease diagnosis. The department is well equipped with advanced dental chairs, intra-oral and extra-oral radiographic machines including radiovisiography, conventional orthopantomography, digital OPG, Cephalometric Unit with digital printer and sophisticated methods for sterilization of surgical instruments so as to render quality care and well being of the patients.

The department offers three-year post-graduate program in addition to undergraduate teaching as per DCI norms and endeavours to provide adequate knowledge, necessary skills and reasonable attitude for carrying out all activities appropriate to general dental practice involving prevention, diagnosis and management of all dental and maxillofacial diseases. The students are exposed to patients with wide range of dental and maxillofacial problems and thus get extensive clinical experience in the diagnosis and management of diseases including precancerous and cancerous lesions of the oral cavity and adequate knowledge about health hazards of radiation and methods for safety and protection.

The faculty members have been assigned the responsibility to look after the maintenance of all the electrical/non-electrical equipments, guide final year students with their quota assigned by the DCI, periodically assess the students theoretically and clinically, keep record of the follow up of special cases and research projects undergoing in the Department, guide the Intems to fulfill quota assigned by the DCI, conduct seminars and supervise project work the Intems.

Ongoing research projects

A. Faculty

Evaluation of salivary secretion and blood flow of parotid submandibular salivary glands in patients of Oral Submucous Fibrosis using high-frequency Color Doppler Sonography.

Principal Investigator: Dr. Priya Singh

Co-Investigators: Dr. Rajat Mathur, Dr. Man Mohan Singh

B. Dissertation of M.D.S. students

Dr. Prachi Anand

Merits and demerits of radiovisuography in institutional dental practice

Supervisor : Dr. M Srinivasa Raju

Co-Supervisor : Dr. NC Sangamesh

Dr. Suzanne Nethan

Diagnostic efficacy of methylene blue staining in patients suffering from potentially malignant oral lesions

Supervisor : Dr. M Srinivasa Raju

Co-Supervisor : Dr. NC Sangamesh

Dr. Deepika Narain

Therapeutic efficacy of curcumin in Oral Submucous Fibrosis

Supervisor : Dr. M Srinivasa Raju

Co-Supervisor : Dr. NC Sangamesh

Membership of Scientific Societies, Committees etc.

| <u>Name</u> | <u>Membership details</u> |
|----------------------|---|
| Dr. M Srinivasa Raju | Member, Editorial Board, J Oral Health & Research Member, Editorial Board, Heal Talk Journal Member, Editorial Board, Teethanker Mahaveer University Dental Journal |
| Dr. NC Sangamesh | Life member, Indian Academy of Oral Medicine & Radiology |
| Dr. Priya Singh | Life member, Indian Academy of Oral Medicine & Radiology |
| Dr. Dipti Singh | Life member, Indian Academy of Oral Medicine & Radiology Member, Indian Dental Association |
| Dr. Rakhi Issrani | Life member, Indian Academy of Oral Medicine & Radiology International Association of General Dentistry |

Brief write-up of papers published

Central giant cell granuloma of the maxilla: A case report and review of the literature

Singh P, Singh A. GUIDENT 5(12):60-61, 2012

A case of a 26-year-old female patient having aggressive variety of central giant cell granuloma is presented with an expansile intraoral growth in the upper left maxillary region which on routine radiograph showed involvement of the maxillary sinus of the same side. Contrast enhanced computed tomography showed well defined mass partially obliterating the left maxillary sinus and causing thinning and destruction of floor, medial and lateral walls of maxillary sinus. The patient was treated by surgical resection. Since the aggressive type has recurrence rate patient is still being monitored clinically and radiologically at regular intervals.

Clinical applications of cone beam computed tomography in periodontics

Agrawal S, Singh D. GUIDENT 5(12):67-70, 2012

Diagnosis of periodontal disease is essential to formulate an effective treatment plan which, in turn, affects treatment outcome. Assessment of the condition of teeth and surrounding alveolar bone depends largely on two-dimensional imaging modalities such as conventional and digital radiography. Though these modalities are very useful and have less radiation exposure, they still can not determine a three dimensional architecture of osseous defects. Hence, an imaging modality which would give an undistorted 3D vision of a tooth and surrounding structures is essential to improve the diagnostic potential. Cone beam computed tomography systems is designed for imaging hard tissues of the maxillofacial region. CBCT is capable of providing sub millimeter resolution in images of high diagnostic quality, with short scanning times and radiation dosage reportedly up to 15 times lower than those of conventional CT scans. This article provides an overview of currently available maxillofacial CBCT systems and reviews the specific application of various CBCT in periodontology.

Angina Bullosa Hemorrhagica: A case report

Singh D, Misra N, Agarwal S, Misra P. BMJ Case Reports 2013 (doi: 10.1136/bcr-2012-008505)

Angina Bullosa Hemorrhagica is the term used to describe acute benign and generally subepithelial oral mucosal blisters filled with blood that are not attributable to a systemic disorder or hemostatic defect. It is a very rare condition. Elderly patients are usually affected and lesions heal spontaneously without scarring. The pathogenesis is unknown, although it may be a multifactorial phenomenon. Trauma seems to be the major provoking factor and long term use of steroid inhalers has also been implicated in the disease. We present a 50-year-old patient with Angina Bullosa Hemorrhagica. Trauma by sharp cusp of adjacent tooth and metal crown were identified as etiological factors in this case. Lesions healed after removal of metal crown and rounding of cusp. Recognition of the lesion seems to be of great importance for dentists to avoid misdiagnosis.

Department of Oral Pathology & Microbiology

The Staff

Professors

Dr. Shaleen Chandra, M.D.S., *Head of the Department*



Dr. Shaleen Chandra

Readers

Dr. Vineet Raj, M.D.S.

Senior Lecturers

Dr. Jagadish P Rajguru, M.D.S.

Dr. Nidhi Dwivedi, M.D.S.

Lecturers

Dr. Ashish Seth, B.D.S.

Dr. Meenal Mathur, B.D.S.

The Charter

The Department of Oral Pathology & Microbiology performs two basic functions in addition to research activities for betterment of mankind. First and foremost is the teaching of undergraduate and postgraduate students. At undergraduate level, the department takes care of teaching of Dental Anatomy and Oral Histology during the first year and Oral Pathology, Microbiology and Forensic Odontology during the second and third year. In case of postgraduate students, the aim is to make them rich with complete knowledge of General and Oral Microbiology, Oral Pathology and Embryology of the head and neck so as to mould them into a good teacher and an efficient Oral Pathologist. The second major function of the department is to provide efficient and conclusive histopathological and cytopathological services to the patients.

The research works undertaken in the department primarily relate to early diagnosis and understanding of oral conditions prevalent in India, so as to facilitate better management of the oral diseases.

The Department continuously strives to improve and upgrade the level of undergraduate and graduate teaching, upgrade infrastructure facilities, establish full fledged immunohistochemistry and immunofluorescence laboratory so as to emerge as a nodal center for advanced diagnosis and research in the area of oral pathology and especially in the area of oral cancer.

Ongoing research projects

Dissertation of M.D.S. students

Dr. Amit Thahriani

Mast cells and angiogenesis in oral malignant and premalignant lesions

Supervisor: Dr. Shaleen Chandra

Co-Supervisor: Dr. RM Mathur, Dr. Vineet Raj

Dr. Mani Madan

Evaluation of cell proliferation in malignant and potentially malignant oral lesions

Supervisor: Dr. Shaleen Chandra

Co-Supervisor: Dr. RM Mathur, Dr. Vineet Raj

M.D.S. Degree awarded

Dr. Nidhi Dwivedi

Expression of Ki-67 in oral epithelial dysplasia and oral squamous cell carcinoma

Supervisor: Dr. Shaleen Chandra

Co-Supervisor: Dr. Vineet Raj, Dr. Bina Kashyap

Dr. Ruby Dwivedi

Expression of bcl-2 in oral epithelial dysplasia and oral squamous cell carcinoma

Supervisor: Dr. Shaleen Chandra

Co-Supervisor: Dr. Bina Kashyap, Dr. Vineet Raj

Membership of Scientific Societies, Committees etc.

| <u>Name</u> | <u>Membership details</u> |
|------------------------|---|
| Prof. Shaleen Chandra | Life Member, Indian Association of Oral and Maxillofacial Pathologists Vice President, Indian Association of Oral and Maxillofacial Pathologists Life Member, Indian Society of Oral Implantologists Member, Indian Dental Association Member, Board of Studies of Rohilkhand University Member, Board of Studies of Agra University |
| Dr. Vineet Raj | Life Member, Indian Association of Oral and Maxillofacial Pathologists |
| Dr. Bina Kashyap | Life Member, Indian Association of Oral and Maxillofacial Pathologists |
| Dr. Jagadish P Rajguru | Life Member, Indian Association of Oral and Maxillofacial Pathologists |
| Dr. Nidhi Dwivedi | Life Member, Indian Association of Oral and Maxillofacial Pathologists |

Brief write-up of published papers

Programmed self-cell suicide (apoptosis) – Current review, concepts and future prospects

Rajguru JP, Masthan KMK, Thirugnanasambandan TS, Aravindhababu N. Indian J Multidisciplin Dent 2:500-506, 2012

Homeostasis of tissues depends upon cell division and proliferation. Well-organized or programmed cell death (apoptosis) is an intrinsic mechanism of our human body playing in various physiological and pathological processes during evolution. This type of programmed cell death (PCD) is essential for development of highly cellular organisms. Apoptosis plays a major role in embryogenesis and many diseases like neoplasia, necrosis, acquired-immunodeficiency syndrome (AIDS) and neurogenic disorders. It releases new essential activated death receptors and mitochondria, which are the beginning of the pathway proposed for initiating apoptosis. This process is regulated by intra-and extrasomatic signals. Damage of cell results in activation of a family of caspases (CASP). Caspases are released by inactivated proenzymes activating various organelles in cytosol and nucleus. This leads to cellular

monopoly change and cell death. Uncontrolled mechanisms of signals lead to pathology in the body. Hence, clinically much pathology is the ultimate result of either increased or decreased apoptosis.

How to help the oral pathologist in making an accurate diagnosis

Masthan KMK, Leenasankari S, Aravindhbabu N, Rajguru JP. J Clin Diagn Res 7:181-184, 2013.

A biopsy is a valuable diagnostic tool in clinics. In this procedure, the sample tissue is obtained in order to study its structure both macro and microscopically, thus making it possible to establish a final diagnosis. Some clinicians are surprised and disappointed when the report from the oral pathologist comes as “not from the representative area and “inadequate specimen size”, instead of a final diagnosis. To avoid such disappointments and to make the best utilization of the skills of the oral pathologist, certain ideas have been suggested. Right from the history taking to the clinical examination to the operative findings, the clinician can pave the way to a conclusive histopathological diagnosis.

Micronuclei assay of exfoliated oral buccal cells: Means to assess the nuclear abnormalities in different diseases

Kashyap B, Reddy PS. J Cancer Res Ther 8:184-191, 2012

The micronuclei assay (MA) in exfoliated buccal cells is an innovative genotoxicity technique, which holds promise for the study of epithelial carcinogens. Micronuclei are suitable internal dosimeters for revealing tissue-specific genotoxic damage in individuals exposed to carcinogenic mixtures. This article reviews the MN assay with respect to oral buccal mucosa, which has been used since the 1980s to demonstrate cytogenetic effects of environmental and occupational exposures, lifestyle factors, dietary deficiencies, and different diseases along with the characteristics of micronuclei and other nuclear abnormalities.

Comparison of centrifuged liquid based cytology method with conventional brush cytology in oral lesions

Dwivedi N, Agarwal A, Raj V, Kashyap B, Chandra S. Eur J Gen Dent 1:192-196, 2012

Exfoliative cytology is the study of cells that are shed or scrapped off from mucosal surfaces. Centrifuged Liquid based cytology is a modified technique employed in the present study. The study was aimed to compare the utility of centrifuged liquid based cytology with conventional cytology in oral lesions after staining with Papanicolaou (PAP) stain. 50 cases of oral lesions comprising of normal mucosa (n=14), hyperkeratotic lesions (n=17), ulcerated lesions (n=7) and atrophic lesions (n=12) were selected. Two smears were obtained from the lesion using a cytological brush. One was spread on the slide using conventional technique, fixed immediately in 95% ethyl alcohol. Second sample was suspended in suspending solution for 10 minutes then spun in centrifuge for 10 minutes. The supernatant was poured off and the obtained cell pellet was used to prepare a smear by sedimentation and left to dry overnight. Both the smears were stained by PAP. The stained smears were compared for seven morphological parameters such as adequacy of smear, clear background, cell distribution, smear thickness, cell morphology, and presence of blood, inflammatory cells, microbial colonies and artifacts. Wilcoxon Signed rank test was used and $P \leq 0.05$ was considered statistically significant. There was a statistically significant difference ($P < 0.001$) between centrifuged liquid based cytology and conventional cytology when clear background was evaluated while in all other parameters the difference was not significant. Findings indicate that centrifuged Liquid based cytology showed clearer background than conventional brush cytology in oral lesions.

Histological evaluation of toluidine blue positive and negative sites in oral leukoplakia

Khare P, Chandra S, Raj V. Kerala Dental J 3:317-320, 2012

Screening of suspicious oral lesions can help in the early detection of oral cancer and can help in reducing the morbidity associated with this condition. Incisional biopsy of the suspicious lesion remains a gold standard for diagnosis of oral premalignancy though the question of when to perform the biopsy and which site to choose remains debatable. Toluidine blue (TB) offers a potentially simple, inexpensive, and sensitive chair-side solution for screening of early oral SCC and high-grade dysplasias. Aims & Objective : To assess the reliability of toluidine blue as clinical screening test, for detection of epithelial dysplasia & its role in identifying the appropriate site for incisional biopsy. Study Design: Study Group consisted of 18 patients with leukoplakia. Biopsy specimens were taken, one from the most intensely stained area with TB (A) & second from surrounding unstained/ weakly stained area (B) of the lesion. The histological sections were assessed and graded for epithelial dysplasia by three observers, and the findings of the two biopsy sites analyzed statistically. Result: It is seen that there was 100% agreement between the three observers for clinically toluidine blue positive site being dysplastic histologically. Inter observe variability group A = 1; $p < 0.001$ and for group B = 0.42; $p = 0.002$.

DNA extraction and gene amplification from saliva deposited on skin using double swab technique

Khare P, Raj V, Chandra S, Agarwal S. Indian J Forensic Odontol 5:61-68, 2012

Saliva may be found on victims of several violent crimes and it has been shown that it can also be potentially recovered and typed from bite marks, cigarette butts, postage stamps, envelopes and other objects. The double swab technique has been shown to increase the amount of salivary DNA recovered from skin when compared to other methods. The study was aimed to recover DNA from saliva deposited on human skin by double swab method and amplification of microsatellites and minisatellites from the recovered DNA. Saliva from five volunteers was deposited on human skin and recovered using the double swab technique. DNA extraction was done using phenol chloroform method and PCR was used for amplification of 5 genes {Amelogenin (AMG), von Willebrand factor (vWF), F13 and D4S and Apolipoprotein (APO B)}. DNA was obtained from blood and direct salivary samples of the same volunteers and was used to compare the gene amplifications obtained by double swab technique. We found that using the DNA recovered from double swab technique F13 could be amplified in all 5 samples (100%) saliva samples deposited on skin, AMG, D4S and APO B genes could be amplified in 80%, 60% and 40% samples respectively whereas vWF gene failed to amplify in any of the sample. DNA amplified from all five samples of double swab technique matched positively with DNA obtained from saliva and blood. Findings demonstrate that double swab technique can be used for isolating DNA from deposited saliva samples for the purpose of forensic study though the technique needs to be refined.

Department of Orthodontics & Dentofacial Orthopedics

The Staff

Professors

Dr. Ragni Tandon, M.D.S., *Head of the Department*

Dr. Gurmeet Kaur, M.D.S.



Dr. Ragni Tandon

Readers

Dr. Ramandeep Kaur, M.D.S.

Dr. Aftab Azam, M.D.S.

Dr. Shrish Charan Srivastava, M.D.S.

Dr. Ashish Goel, M.D.S.

Dr. Madhvi Bhardwaj, M.D.S.

Senior Lecturers

Dr. Manoj Sharma, M.D.S.

Dr. Pratik Chandra, M.D.S.

The Charter

The Department of Orthodontics & Dentofacial Orthopedics deals with the interception and management of all dental and facial growth related disorders including malocclusion. The department is well equipped with advanced dental chairs, sophisticated equipments and advanced methods for sterilization so as to render quality care and well being of the patients.

The Department offers three-year post-graduate program in addition to undergraduate teaching as per DCI norms. We endeavor to provide adequate knowledge, necessary skills and reasonable attitude for carrying out all activities appropriate to specialized practice of orthodontics and dentofacial orthopedics by the specialists and related general dental practice by the undergraduates involving prevention, diagnosis and management of malocclusion. The students are exposed to patients with wide range of malocclusions and oro-facial growth problems and thus get extensive clinical experience in their diagnosis and management.

We provide basic and advanced training in the management of malocclusion with all types of removable and fixed appliances. A special emphasis is laid on Angle philosophy and Tweed appliance leading to the recent techniques of various SWA systems. We also provide advanced training of cases requiring growth modification with various techniques including surgical and cleft orthodontics.

Ongoing research projects

Dissertation of M.D.S. Students

Dr. Sarvesh Raj Choudhary

Prevalence of orthodontic treatment need

Supervisor: Dr Ragni Tandon

Co-Supervisors: Dr. Ashish Goel, Dr. Aftab Azam

Dr. Rajnish Kumar

Comparison of efficacy and reproducibility of assessing dental crowding by three methods

Supervisor: Dr Ragni Tandon

Co-Supervisors: Dr Shrish Charan Srivastava, Dr. Pratik Chandra

Dr. Mayank Gupta

Determination of stress distribution at different PDL thickness and alveolar bone height with various tooth movement: A FEM study

Supervisor: Dr. Gurmeet Kaur

Co-Supervisors: Dr. Nachikita Tiwari, Dr. Ashish Goel, Dr. Manoj Sharma

Dr. Rohit Kulshrestha

Analysis of the pharyngeal airway space and tongue position on lateral cephalogram of Lucknow population

Supervisor: Dr Ragni Tandon

Co-Supervisors: Dr Ashish Goel, Dr Manoj Sharma

Dr. Amit Sidana

Quantitative changes in cariogenic *Streptococci* and subgingival microbiota in patients before and during orthodontic treatment

Supervisor: Dr Ragni Tandon

Co-Supervisors: Dr. Asha Mathur, Dr. Shrish Charan Srivastava

Dr. Ashish Kakadiya

Assessment of patient perception and reaction towards orthodontic treatment

Supervisor: Dr Ragni Tandon

Co-Supervisors: Dr. Ashish Goel, Dr. Pratik Chandra

Dr. Anisha Janu

Photographic evaluation of an aesthetic smile

Supervisor: Dr. Aftab Azam

Co-Supervisors: Dr. Ragni Tandon, Dr. Pratik Chandra

Dr. Vinay Umale

A cephalometric evaluation of the relationship between nose and horizontal lip position in Class I and Class II skeletal malocclusion in adults

Supervisor: Dr. Gurmeet Kaur

Co-Supervisors: Dr. Aftab Azam, Dr. Madhvi Bhardwaj

M.D.S. Dissertation submitted

Dr. Abhishek Singh

Cephalometric evaluation of changes in skeletal and soft tissue point A and B following retraction of teeth

Supervisor: Dr Ragni Tandon

Co-Supervisors: Dr. Ashish Goel, Dr. Pratik Chandra

Dr. Prachi Goel

A comparative study of different intrusion methods and their effect on incisors

Supervisor: Dr Ragni Tandon

Co-Supervisors: Dr. Aftab Azam, Dr. Manoj Sharma

M.D.S. Degree awarded

Dr. Sanjay Singh

Evaluation of shear bond strength of various bonding materials: An in vitro study

Supervisor: Dr. Ragni Tandon

Co-Supervisors: Dr. Anju Loomba, Dr. Utkarsh, Dr. Preeti, Dr. Ashish Goel

Dr. Vijeta Yadav

A comparative evaluation of dental calcification stage and skeletal maturity indicator

Supervisor: Dr. Anju Loomba

Co-Supervisors: Dr. Ragni Tandon, Dr. Utkarsh, Dr. Preeti, Dr. Ashish Goel

Membership of Scientific Societies, Committees etc.

| <u>Name</u> | <u>Membership details</u> |
|-----------------------------|--|
| Dr Ragni Tandon | Member, Indian Orthodontic Society Convener, Orthodontic Study Group, Lucknow (OSGOL) Member, Board of Studies, Department of Orthodontics, KGMC, Lucknow |
| Dr Aftab Azam | Member, Indian Orthodontic Society |
| Dr Shrish Charan Srivastava | Member, Indian Orthodontic Society |
| Dr Ashish Goel | Member, Indian Orthodontic Society Member, Orthodontic Study Group, Lucknow Member, Indian Dental Association Fellow, Academy of General Education Member, Royal Society of Health, U.K. Associate Editor, J Dentofacial Sciences |
| Dr Madhvi Bhardwaj | Member, Indian Orthodontic Society |
| Dr Manoj Sharma | Member, Indian Orthodontic Society |
| Dr Pratik Chandra | Member, Indian Orthodontic Society Member, Orthodontic Study Group, Lucknow Managing Editor, J Dentofacial Sciences Member, Senior Advisory Board, Heal Talk Journal |

Brief write-up of published papers

Quantitative analysis of Nickel Titanium Arch Wires

Loomba A, Goel A, Verma P. J Indian Orthodont Soc 46(4):92-98, 2012

An analysis of various arch forms of Class I, II and III malocclusions pre and post treatment was done and correlated with various arch lengths supplied for arch wires as preformed packets. It exhibited a significant wastage of archwires and therefore leading to environmental issues.

Department of Pedodontics & Preventive Dentistry

The Staff

Professors

Dr. Rachana Bahuguna, M.D.S., *Head of the Department*



Dr. Rachana Bahuguna

Readers

Dr. Suleman Abbas Khan, M.D.S.

Dr. Seema Malhotra, M.D.S.

Senior Lecturers

Dr. Nitin Singh, M.D.S.

The Charter

Pedodontics is an age defined specialty that provides primary and comprehensive, preventive and therapeutic oral health care for infants and children through adolescence, including those with special health care needs.

Department of Pedodontics and Preventive dentistry offers graduate program leading to Bachelor of Dental Surgery degree awarded by Ram Manohar Lohia Awadh University. This course is approved and accredited by the Dental Council of India. Department also has the post-graduate training course.

The goals of the branch of Pedodontics deal with the identification and differentiation of normal and abnormal somatic dentofacial and psychological growth and development, understand child behaviour and anxiety, and communicate with and manage children showing apprehension and moderately disruptive behavior using behavioral and pharmacotherapeutic techniques. We develop an accurate database from information received from the child and the parent, formulate an accurate diagnosis, plan appropriate therapy for common oral health problems in children, and provide treatment for mental, physical and emotionally handicapped children including medically compromised patients. We recognize and manage medical emergencies commonly encountered in children and adolescents undergoing treatment and make appropriate referrals.

Faculty of the department is committed towards an excellence in teaching schedules. Students are assessed from time to time by internal assessment examinations, case discussions, demonstrations, group discussions, viva-voce, seminars and journal completion.

Ongoing research projects

Dr. Priyamvada Kulshreshtha

Association between dental caries prevalence and body mass index in 6-12 year old children - A cross sectional study

Supervisor: Dr. Rachana Bahuguna

Co-Supervisors: Dr. Suleman Abbas Khan

Dr. Sankalp Rohatgi

Comparative evaluation of different delivery systems for placement of calcium hydroxide in root canal: An in vitro study

Supervisor: Dr. Rachana Bahuguna

Co-Supervisors: Dr. Suleman Abbas Khan

Dr. Dheera Chadha

Assessment and correlation of dermatoglyphic patterns in early childhood caries

Supervisor: Dr. Rachana Bahuguna

Co-Supervisors: Dr. Suleman Abbas Khan

Dr. Nikita Johri

Effectiveness and comparison of various audio distraction aids in management of anxious dental pediatric patient

Supervisor: Dr. Rachana Bahuguna

Co-Supervisors: Dr. Suleman Abbas Khan

Dr. Rahul Singh

Relationship between dental fluorosis and intelligence quotient in school children in and around Lucknow district

Supervisor: Dr. Rachana Bahuguna

Co-Supervisors: Dr. Suleman Abbas Khan

MDS Thesis submitted

Dr. Meenakshi Upadhaya

A comparative evaluation of the effect of different bleaching agents on human enamel surface morphology at different time intervals: A SEM study

Supervisor: Dr. Rachana Bahuguna

Co-Supervisors: Dr. Suleman Abbas Khan, Dr. Atul Jain

Dr. Neha Saxena

Estimation of salivary secretory immunoglobulin A, Streptococcus mutans count, salivary sodium, potassium levels in caries free, and caries active children: A case control study

Supervisor: Dr. Rachana Bahuguna

Co-Supervisors: Dr. Suleman Abbas Khan, Dr. Asha Mathur, Dr. SN Malhotra

M.D.S. Degree awarded

Dr. Tarun Sethi

Photographic and radiographic assessment of divine proportion in growing face

Supervisor: Dr. Rachana Bahuguna

Co-Supervisors: Dr. Suleman Abbas Khan

Dr. Tapan Singh
Prevalence of physiological space and evaluation of molar relationship in pre-school children
Supervisor: Dr. Rachana Bahuguna
Co-Supervisors: Dr. Suleman Abbas Khan

Membership of Scientific Societies, Committees etc.

| <u>Name</u> | <u>Membership details</u> |
|------------------------|--|
| Dr. Rachana Bahuguna | Life Member, Academy of Pedodontics, U.P. Chapter |
| Dr. Suleman Abbas Khan | Life Member, Indian Society of Pedodontics & Preventive Dentistry Life Member, Academy of Pedodontics, U.P. Chapter |
| Dr. Seema Malhotra | Life Member, Indian Society of Pedodontics & Preventive Dentistry Life Member Academy of Pedodontics, U.P. Chapter Indian Dental Association |
| Dr. Nitin Singh | Life Member, Academy of Pedodontics, U.P. Chapter |
| Dr. Sansriti Narain | Life Member, Academy of Pedodontics, U.P. Chapter Life Member, Indian Society of Pedodontics & Preventive Dentistry |

Brief write-up of published papers

Current biomedical waste management practices and cross-infection control procedures of dentists in India

Singh BP, Khan SA, Agarwal N, Siddharth R, Kumar L. Inter Dent J 62:111-116, 2012

This study was aimed to investigate the knowledge, attitudes and behavior of dentists working in dental clinics and dental hospitals regarding biomedical waste management and cross-infection control. A national survey was conducted. Self-administered questionnaires were sent to 800 dentists across India. A total of 494 dentists responded, giving a response rate of 61.8%. Of these, 228 of 323 (70.6%) general dentists reported using boiling water as a sterilizing medium and 339 (68.6%) dentists reported disposing of hazardous waste such as syringes, blades and ampoules in dustbins and emptying these into municipal corporation bins. Findings indicate that the dentists should undergo continuing education programmes on biomedical waste management and infection control guidelines. Greater cooperation between dental clinics and hospitals and pollution control boards is needed to ensure the proper handling and disposal of biomedical waste.

Prevalence of dental caries and dental fluorosis amongst children of low, moderate and fluoride areas in Lucknow district of Uttar Pradesh: A clinical survey

Jain A, Tyagi P, Khan SA, Jain M, Agarwal A. J Indian Assoc Public Health Dent 20:66-71, 2012

This study was aimed to assess point prevalence of dental fluorosis and dental caries and their interrelationship in children of age group 10-14 years from areas in Lucknow district with low(0-0.5 mg/l), moderate (0.5-1.1 mg/ml) and high (>2 mg/ml) concentration of fluoride in drinking water. A total of 531 school going children were included in the study. Dental caries and dental fluorosis was recorded (WHO 1997) under standardized conditions. All children residing in their respective areas since birth were included and only permanent teeth were examined. Intraoral examination was carried by a single examiner. Mean DMFT was found to be 2.21, 0.96 and 0.78 whereas mean CFI was found to be 0.02 and 0.36 from the three areas respectively. A statistically significant ($p < 0.001$) difference was observed in caries prevalence in low fluoride area as compared to other areas whereas dental fluorosis prevalence in high fluoride area was found to be highest and also statistically significant ($p < 0.001$) from other two areas. It was concluded that dental caries increases with increasing severity of fluorosis in low, moderate and high fluoride areas. Thus a positive relationship is seen between dental caries and dental fluorosis in all three areas.

Dens invaginatus: review, relevance, and report of 3 cases

Khan SA, Khan SY, Bains VK, Bains R, Loomba K. J Dent Child 79(3):143-153, 2012

Dens invaginatus is a rare developmental morphoanatomical variation resulting from the infolding of the dental papilla before biological mineralization that allows the invagination of inner dental epithelium. Permanent maxillary lateral

incisors are most commonly affected, and the condition is frequently bilateral, but it may also prevail in permanent maxillary central incisors. The purpose of this paper was to provide an overview of the etiopathogenesis, frequency of occurrence, and clinical and radiographic features and to discuss 3 dens invaginatus cases.

Pharmacological attribute of Aloe vera: Revalidation through experimental and clinical studies

Gupta VK, Malhotra S. AYU (An International Quarterly Journal of Research in Ayurveda) 33(2):193-196, 2012

Aloe vera has long been used as a traditional medicine for inducing wound healing. It is a natural product that now a days is used in cosmetic industry. Benefits associated with Aloe vera have been attributed to the polysaccharides contained in the gel of the leaves though there are various indications for its use. Biological activities include promotion of wound healing, antifungal activity, anti-inflammatory, anticancer and immune-modulatory. Gingival fibroblasts play an important role in oral wound healing. Double blind-controlled trials are needed to determine its real efficacy in oral health.

Painless anesthesia: A new approach

Singh N, Agarwal S, Bhagchandani J, Chandra P, Gaur A. J Dentofac Sci 2(2):49-55, 2012

It is unfortunate that the methods used to control dental operative pain may themselves produce distress. It should be the aim of all caring practitioner to reduce injection sensation to minimum so as to alleviate the apprehension and fear from the patient's mind. The fear of needle prick is a bigger reason of concern and the major cause of avoidance of dental treatment despite the detrimental effect of progressive dental caries. Various new anesthetic agents comprising of eutectic mixtures of anesthetics, anesthetic delivery devices which uses pressure and vibration and supplemental anesthesia into the osseous tissue have been introduced to lessen the pain and reduce the area to be anesthetized thus decreasing the failure rates of achieving local anesthesia and the unwanted residual effects of the anesthesia.

Department of Periodontics

The Staff

Professors

Dr. Rajesh Jhingran, M.D.S., *Head of the Department*
Dr. GP Singh, M.D.S.



Dr. Rajesh Jhingran

Readers

Dr. Vivek Kumar Bains, M.D.S.
Dr. Vivek Gupta, M.D.S.

Senior Lecturers

Dr. Nishi Singh, M.D.S.
Dr. Rohit Madan, M.D.S.
Dr. Iram Rizvi, M.D.S.

The Charter

Periodontology is the science dealing with the health and diseases of the investing and supporting structures of the teeth and oral mucous membranes. The Department of Periodontics deals with the motivation, education and providing all kinds of nonsurgical and surgical treatment pertaining to patients with oral and periodontal diseases. Department provides quality education to third and fourth year BDS students. This helps them to understand etiopathogenesis, diagnosis and management of common periodontal diseases. With the annual intake of two postgraduate students, the department provides basic and advanced education that helps in developing theoretical and practical knowledge and skill in the area of periodontology and oral implantology.

Ongoing research projects during the year

A. Faculty

Evaluation autogenous Platelet Rich Fibrin in the treatment of gingival recession: A clinical study

Principal Investigator: Dr. GP Singh

Co-Investigators: Dr. Vivek Bains, Dr. Vivek Gupta

B. Dissertation of M.D.S. Students

Dr. Swyeta Jain Gupta

Evaluation of enamel matrix derivative in the treatment of intrabony defects - A clinico-radiographical study

Supervisor: Dr. Rajesh Jhingran,

Co-Supervisors: Dr. Vivek Gupta, Dr. Vivek Bains, Dr. Rohit Madan

Dr. Mahendra Mohan

C-reactive protein level in serum and gingival crevicular fluid in chronic periodontitis patients with type-2 diabetes mellitus before and after scaling and root planing - A clinico-biochemical study

Supervisor: Dr. Rajesh Jhingran

Co-Supervisors: Dr. Vivek Bains, Dr. Vivek Gupta, Dr. Kanchan Mani, Dr. Nishi Singh

Dr. Sumit Kumar Agarwal

Microsurgical management of gingival recession using platelet rich fibrin (PRF) and amnion membrane: A comparative study

Supervisor: Dr. Rajesh Jhingran

Co-Supervisors: Dr. Vivek Bains, Dr. Vivek Gupta, Dr. Nishi Singh

Dr. Swati Das

Comparative evaluation of platelet rich fibrin (PRF) and β tricacium phosphate with type I collagen (RTR cones) in extraction socket preservation: A clinico-radiographic study

Supervisor: Dr. Rajesh Jhingran

Co-Supervisors: Dr. Vivek Gupta, Dr. Vivek Bains, Dr. Rohit Madan

M.D.S. Dissertation submitted during the year

Dr. Ashish Mathur

Comparative evaluation between autogenous bone graft and Platelet Rich Fibrin in treatment of intrabony periodontal defects: A clinico-radiographic study

Supervisor: Dr. GP Singh

Co-Supervisors: Dr. Rajesh Jhingran, Dr. Vivek Bains, Dr. Vivek Gupta

Dr. Asmita

Comparative evaluation of regenerative potential of Novabone Dental Putty and Perioglas for treatment of furcation defect: A Clinico-Radiographic study

Supervisor: Dr. GP Singh

Co-Supervisors: Dr. Rajesh Jhingran, Dr. Vivek Bains, Dr. Vivek Gupta

M.D.S. Degree awarded during the year

Dr Robin Srivastava

Comparison of microsurgical versus macrosurgical technique for root coverage of localised gingival recession using coronally positioned flap with alloderm

Supervisor: Dr. Sudhir Patil

Co-Supervisors: Dr. GP Singh, Dr. Vivek Gupta, Dr. Vivek Bains

Membership of Scientific Societies, Committees etc.

| <u>Name</u> | <u>Membership details</u> |
|---------------------|--|
| Dr. Rajesh Jhingran | Member, Indian Society of Periodontology Member, Indian Dental Association |
| Dr. GP Singh | Member, Indian Society of Periodontology Member, Indian Dental Association Fellow, International College of Dentists |
| Dr. Vivek Bains | Member, Indian Society of Periodontology Member, Indian Society of Prosthodontics, Restorative Dentistry & Periodontics Member, Indian Dental Association |
| Dr. Vivek Gupta | Member, Indian Society of Periodontology Member, Indian Dental Association |
| Dr. Nishi Singh | Member, Indian Dental Association |
| Dr. Rohit Madan | Member, Indian Society of Periodontology Member, Indian Academy of Osseointegration Member, Indian Dental Association Fellow, Academy of General Education (FAGE) |

Brief write-up of published papers

Tissue engineering and its application in endodontics: An overview

Loomba K, Bains R, Bains VK, Loomba A, Nadig R, Shrivastava TV. Endodont Practice Today 6(2):105-112, 2012

The study was aimed to gain an overview of the basic concept of tissue engineering, which helps in understanding its potential application and scope in the field of clinical endodontic practice. The accepted use of regenerative therapy in the field of endodontics can be designed to restore and replace lost dentine, pulp, cementum and periodontal tissues. The key elements of tissue engineering are the stem cells or units, the signals or growth factors/morphogens (GFs), and a carrier or scaffold of extracellular matrix. The dental pulp has been identified as a source of mesenchymal stem cells, which by definition are adult multipotent stem cells that are capable of differentiating into mesenchymal and

non-mesenchymal tissues, such as fat, bone, cartilage and neural cells. The pulp from extracted third molars, teeth extracted for orthodontic or periodontal reasons or supernumerary teeth offer a valuable source of stem cells for research. Autologous dental pulp stem cells may be frequently used for pulp regeneration. Induced pluripotent stem cells, which are artificially derived through stem cell gene transfer into an adult stem cell, may have the potential to be utilised as an alternative source for autologous pulp tissue regeneration.

Management of pulpal floor perforation and grade II Furcation involvement using MTA and platelet rich fibrin: A Clinical report

Bains R, Bains VK, Loomba K, Verma K, Nasir A. *Contemp Clin Dent* 3 (Supplement 2):43-47, 2012

This study reports the management of an iatrogenic perforation of pulpal floor in the furcation of mandibular first molar, using Mineral Trioxide Aggregate (MTA) and platelet rich fibrin (PRF). Unpredictable endodontic root/pulp chamber floor perforations resulting in unacceptable high rate of clinical failure has now been a lesser threat with the advent of new technologies and biocompatible materials that utilize the applications of basic research along with tissue engineering concept in clinical practice. Present case report illustrates the use of MTA and platelet rich fibrin (PRF) for the repair of the perforation defect and regeneration of the lost periodontium in furcation area. Although, histologic events and reaction of MTA with PRF is not studied so far, however, the autologous and biocompatible nature of the components used for present treatment modalities seems to be beneficial for the long term clinical results obtained in our case.

Dens Invaginatus: Review, relevance and report of 3 cases

Khan SA, Khan SY, Bains VK, Bains R, Loomba K. *J Dent Child (Chic)* 79(3):143-153, 2012

Dens invaginatus is a rare developmental morphoanatomical variation resulting from the infolding of the dental papilla before biological mineralization that allows the invagination of inner dental epithelium. Permanent maxillary lateral incisors are most commonly affected, and the condition is frequently bilateral, but it may also prevail in permanent maxillary central incisors. The purpose of this paper was to provide an overview of the etiopathogenesis, frequency of occurrence, and clinical and radiographic features and to discuss 3 dens invaginatus cases.

Management of a dentigerous cyst in a medically compromised geriatric patient: A case report

Loomba A, Loomba K, Bains R, Bains VK. *Gerodontology* 29:e1190-e1194, 2012

Because of the increasing number of older persons seeking dental care, the growing trend towards a longer dental appointment and increased administration of drugs in dentistry, the possibility of occurrence of medical emergencies in dental offices has shown an upward trend. This case report discusses enucleation of a central dentigerous cyst in a 72-year old male on long-term low dose aspirin therapy. Surgical removal of impacted tooth with total enucleation of cystic lesion was performed in the dental chair under 2% lidocaine with 1:200,000 adrenaline, 3 days after aspirin cessation. After complete debridement of the surgical site, the wound was sutured and a gauze saturated with 10% tranexamic acid was placed on surgical site for 30 minutes. No post-operative complications or bleeding was seen on subsequent appointment and healing was normal. A geriatric and medically compromised patient demands special care and attention; and the decision to cease aspirin before surgery or not is of critical importance.

Use of custom adapted Broderick Occlusal Plane Analyzer (BOPA) to a Hanau-H2 Articulator in rehabilitation of a complex partial edentulous situation

Singh R, Tripathi A, Singh JP, Singh GP, Singh T. *Asian J Oral Health Allied Sci* 2(1):49-54, 2012

Custom adaptation of Broderick Occlusal Plane Analyzer (BOPA) is used with Hanau H2 Articulators to restore and correct occlusal plane prior to rehabilitation of lost dentition cases. In prosthodontic procedures, when it has been determined that restoration of all or most of the posterior teeth is necessary, the use of the Broderick occlusal plane analyzer provides an easy and practical method to determine an occlusal plane that will fulfill esthetic and functional occlusion requirements. However, several manufacturers of semi adjustable articulators offer no such occlusal plane analyzers for use with these instruments. This case report describes the use of custom adapted Broderick occlusal plane analyser to Hanau H2 semiadjustable articulator as an aid to determine and establish correct curve of Spee, prior to oral rehabilitation procedure.

Full mouth rehabilitation of severely worn dentition: a case report.

Singh R, Tripathi A, Singh GP, Singh SV. *J Intemat Coll Dent* 57(1):29-32, 2012

Aesthetic and functional restoration of severely worn dentition presents a significant clinical challenge. One of the most demanding aspects of such cases involves the development of sufficient restorative space, while simultaneously fulfilling aesthetic, occlusal, and functional parameters essential to long-term successes. This paper focuses on the fixed prosthetic treatment options for such patient and utilization of fixed restorations to create inter-occlusal space.

Department of Prosthodontics & Dental Materials

The Staff

Professors

Prof. Arvind Tripathi, M.D.S., MNAMS, FACS,
FACP, FAAMP, FICD, Head of Deptt.
Prof. Arun P Dupare, M.D.S.



Dr. Arvind Tripathi

Readers

Dr. Sushil K Kar, M.D.S.
Dr. Neerja Raj, M.D.S.
Dr. Hemant Goel, M.D.S.
Dr. Shitij Srivastava, M.D.S.

Senior Lecturers

Dr. Abhishek Rastogi, M.D.S.
Dr. Abhishek Gaur, M.D.S.
Dr. Amita Goel, M.D.S.
Dr. Akanksha Srivastava, B.D.S., Dip. Dent. Mat.

Lecturer:

Dr. Ramesh Singh, B.D.S

The Charter

The Department of Prosthodontics & Dental Materials has successfully diversified the teaching and training curriculum at the post-graduate level by adding components of maxillofacial prosthetics, Cleft Lip and Palate Prosthetics, Sleep Apnea Prosthetics and Geriatric Oral Health. The Department is the first in the country to successfully operate a Craniofacial and Sleep Apnea Prosthetic unit and a Geriatric Oral Health Unit with the support of other centers of health care and medical education. The treatment rendered is free to the patients and has improved the standard of treatment options available to such patients. We have provided treatment to 67 maxillofacial, 18 sleep apnea and 27 cleft lip cleft palate patients, till date. The Department has devised a strategized protocol for complete denture service, which is unique. We propose to expand further by adding Integrated Bone Biology related to Prosthodontic in our curriculum. We also plan to set up a comprehensive and interdepartmental collaborative research facility.

Diversified Curriculum

1. Craniofacial and Sleep Apnea Prosthetic Unit

Craniofacial and sleep apnea prosthetic unit, inaugurated in January 2012 continued to provide patient care services at Lucknow ,Cancer Institute (maxillofacial prosthesis), cleft lip and palate(Sushrut institute of plastic surgery) and obstructive sleep apnea (Dept. of pulmonary medicine, KGMU)

2. Geriatric Oral Health Unit

The Geriatric oral health unit intends to cater to the specific oral health needs of the old and the infirm. Aging brings with it a derangement in physical and mental state and consequent dependence for activities of daily living. Psychosocial issue such as physical and financial insecurity, fear of ostracises and abandonment and depression are common afflictions of the geriatric population. This leads to self apathy and neglect and personal hygiene. The alarming revelation about the relationship of poor oral hygiene and predilection to cardiac and respiratory disease has necessitated a concerted effort at maintenance of oral health and the hygiene of all types of oral prosthesis. Further in caregiver institutions, the nursing staff is often negligent to the protocols of assistance in oral health care. Hence training module for them also need to be evolved. Our team has successfully motivated and treated **15** geriatric patients under the geriatric oral helth care unit at Saraswati Dental college & Hospital.

Ongoing research projects

A. Faculty

Systemic profile of bruxers – a short study

Principal Investigator: Dr. Sushil K Kar

Co-Investigator: Prof. Arvind Tripathi

Oral health status of institutionalized geriatric population with focus on Prosthodontic needs

Principal Investigator: Prof. Arvind Tripathi

Co-Investigator: Dr. Sushil K Kar

Utility of Presurgical Nasoalveolar molding in management of cleft lip and palate patients

Principal Investigator: Prof. Arvind Tripathi

Co-Investigator: Dr. Sushil K Kar

Palmar mapping as a tool to personality- an alternative to MMhouse classification

Principal Investigator: Dr. Sushil Kar Co-Investigator: Prof. Arvind Tripathi

B. Dissertation of MDS students

Dr. Ashutosh Gupta

Direct retainer induced stresses on abutment teeth in Kennedy class II cases: A finite element analysis study

Supervisor: Prof. Arvind Tripathi, Co-supervisor: Dr. Sushil Kar

Dr. Vivek Gautam

An investigation into the bone quality of edentulous mandible using panoramic radiomorphometric indices

Supervisor: Prof. Arvind Tripathi

Co-Supervisor: Dr. Neerja Raj

Dr. Mohd. Anwar

Effect of repeated firing on the properties of nickel- chromium alloys

Supervisor: Prof. Arvind Tripathi, Co-Supervisor: Dr. Paras Vohra

Dr. Abhishek Kumar Katiyar

Study of microleakage in provisional crowns luted with different temporary luting cements

Supervisor: Prof. Arvind Tripathi Co-Supervisor: Dr. Neerja Raj

Dr. Dewanshu Kumar

Psychometric properties of the Indian version of the orofacial esthetic scale and dental aesthetic index

Supervisor: Prof. Arvind Tripathi, Co-Supervisor: Prof. Paras Vohra

Dr. Manish Kumar

Time dependant effect of a denture cleanser on sorption and solubility of soft liners: An in vitro study

Supervisor: Prof. Arun Dupare, Co-Supervisor: Neerja Raj

Dr. Chhavi Trivedi

Effect of different ferrule length on fracture resistance of endodontically treated teeth - An in vitro study

Supervisor: Prof. Arvind Tripathi, Co-Supervisor: Dr. Sushil Kar

Dr. Tahseen Fatima

A comparative study of masticatory efficiency in complete denture patient before and after soft liner application.

Supervisor: Prof. Arun Dupare, Co-Supervisor: Dr. Sushil Kar

Dr. Kriti Madhok

A cephalometric study of vertical dimension at rest and associated soft tissue before and after rehabilitation with complete dentures and single denture

Supervisor: Prof. Arun Dupare, Co-Supervisor: Paras Vohra

M.D.S. Thesis submitted

Dr. Tanmay Srivastava

Comparison of thermal insulating property of the various provisional crown materials - An in vitro study

Supervisor: Prof. Arvind Tripathi Co-Supervisor: Dr. Neerja Raj

Dr. Ravi Gupta

A study to evaluate the effect of oral appliance for the treatment of sleep apnea syndrome on tongue muscle activity

Supervisor: Prof. Arvind Tripathi Co-Supervisor: Dr. Sushil Kar

MDS Degree awarded

Dr Akshay Bhushan

A Study to evaluate the effect of oral appliances for the treatment of sleep apnea syndrome

Supervisor: Prof. Arvind Tripathi

Co-Supervisor: Dr. Sushil Kar

Dr Mayank Singh

An evaluation of masticatory efficiency in subjects with complete dentition and with all missing molar – A comparative study Supervisor: Prof Arvind Tripathi

Co-Supervisor: Dr Neerja Raj

Membership of Scientific Societies, Committees etc.

Faculty Name

Scientific Society

Prof. Arvind Tripathi

Member, National Academy of Medical Sciences
Life Member Indian Prosthodontic Society
Fellow, American Cancer Society
American College of Prosthodontists
American Academy of Maxillofacial Prosthetics
American Cleft Palate Assn.
Int'l College of Dentists

Prof. Arun P. Dupare

Member Indian Prosthodontic Society
Fellow Pierre Fauchard Academy

Dr. Sushil K. Kar

Member, Indian Prosthodontic Society

Dr. Neerja Raj

Member, Indian Prosthodontic Society

Dr. Shitij Srivastava

Member Indian Prosthodontic Society

Dr. Abhishek Rastogi

Member Indian Prosthodontic Society

Dr. Abhishek Gaur

Member Indian Prosthodontic Society

Brief write-up of published papers

A custom made ocular prosthetic rehabilitation of phthisis bulbi patient

Dr Arun Dupare, Roshni Dupare, Lata Dupare. Bhavnagar University Journal Of Dentistry Vol 3 Issue 1 :1-8 May 2012.

The agony over the defect of an eye and vision cannot be described in words. This defect thus poses a serious setback to the patient in terms of facial esthetics, social acceptance and psychological well being. The defect of an eye site having unsightly, small, sunken and nonfunctional is known as Phthisis bulbi. The rehabilitation of such ocular defect is no doubt challenging in terms of replacing a moving organ with a static prosthesis. The most commonly used material for ocular prosthesis is heat cured tooth coloured acrylic resin. This article present case report to custom made ocular prosthesis by functional impression with fine details of eye socket and its fabrication along with consideration of good aesthetics.

Maxillofacial Prosthetic Rehabilitation of a Cancer Patient at Terminal Stage

Dr. Arun Dupare, Dr. Roshni Dupare, Dr. Lata Dupare Dupare A et al NJIRM 2012; 3(2) :173-176

Face is the forefront of aesthetics. Surgical resection of the maxillae and facial structures for treatment of

cancer, trauma, congenital deformities or infection causes maxillofacial defect that has serious impact on the individual's esthetic and has great psychological trauma of social outcast. When the presented defect is extensive and supporting structures is lacking, the rehabilitation and restoring functions is a challenging task. Rehabilitation becomes even more difficult when the problems at defect site are associated with the complications. An attempt has been made to rehabilitate of a patient at terminal stage having extensive maxillofacial defect with inoperable carcinoma, infections, and restricted mouth opening.

Removable partial dentures for a patient with ectodermal dysplasia:

A clinical report

Kar S, Tripathi A. Indian J Dent (published online; <http://dx.doi.org/10.1016/j.ijd.2012.07.02>)

The orofacial characteristics of ectodermal dysplasia include anodontia or hypodontia, hypoplastic, conical teeth, underdevelopment of the alveolar ridges, frontal bossing, a depressed nasal bridge, protuberant lips and hypotrichosis. Patients with this disease often need complex prosthodontic treatment. The option for a definitive treatment plan may include fixed, removable or implant-supported prosthesis, singly or in combination. However, financial constraints and other priorities can prevent the patient from choosing the most desirable treatment. This clinical describes the diagnosis and treatment of ectodermal dysplasia in a 33 year old man. The treatment included endodontic, restorative and definitive removable partial dentures fabricated to establish an acceptable therapeutic occlusal vertical dimension.

Using neutral zone and mandibular guidance concepts to restore aesthetics and function in a hemi-mandibulectomy patient

Kar SK, Tripathi A, Singh S. Indian J Dent Adv 4(2):875-879, 2012

Restoration of function in partial or hemi-mandibulectomy patients can be complicated and often impossible, without preliminary planning and cooperation between the surgeon and the prosthodontist. The designed prosthesis has to function in deranged neuromuscular function on a deficient tissue bed. The prosthesis must be inserted as soon as possible following surgery to prevent fixation of the residual mandible by cicatricial tissue. This report details how to achieve near normal maxillomandibular relations in a patient with mandibular discontinuity. Acceptable results were obtained with the guidance prosthesis utilising neutral zone concept.

Full mouth rehabilitation of hypomaturation type amelogenesis imperfecta: A clinical report

Kar SK, K, Tripathi A, Singh SV. J Oral Biol Craniofac Res (published online; <http://dx.doi.org/10.1016/j.jobcr.2012.09.003>)

This clinical report describes the prosthodontic treatment of an 18 year old female diagnosed with amelogenesis imperfect. The specific objective of the treatment were to restore esthetics and masticatory function. Metal-ceramic fixed partial dentures were fabricated at the existing vertical dimension of occlusion utilizing the PMS occlusal scheme. Clinical examination of the patient 12 months after treatment revealed no evidence of disease or degeneration of the restored teeth. The patient's esthetic and functional expectations were satisfied.

Interim palatal lift prosthesis as a constituent of multidisciplinary approach in the treatment of velopharyngeal incompetence

Raj N, Raj V, Aeram H. J Adv Prosthodont 4:243-247, 2012

The velopharynx is a tridimensional muscular valve located between the oral and nasal cavities, consisting of the lateral and posterior pharyngeal walls and soft palate, and controls the passage of air. Velopharyngeal insufficiency may take place when the velopharyngeal valve is unable to perform its own closing, due to a lack of tissue or lack of proper movement. Treatment options include surgical correction, prosthetic rehabilitation and speech therapy; though optimal results often require a multidisciplinary approach for the restoration of both anatomical and physiological defect. We report a case of 56 year old male patient presenting with hypernasal speech pattern and velopharyngeal insufficiency secondary to cleft palate which had been surgically corrected 18 years ago. The patients were treated with a combination of speech therapy and palatal lift prosthesis employing interim prosthesis in various phases before the insertion of definitive appliance. This phase wise treatment plan helped to improve patient's compliance and final outcome

Digital impressions

Rastogi A, Srivastava S. Digital impression. Indian Dent J 4:35-37, 2012.

For last several years, researchers have been trying to automate conventional manual processes of impression making with the hope of making the procedure more accurate simpler, and quicker. In this article we provide

an overview of current digital impressing procedure. its advantages over conventional procedures and suggest future possibilities.

Evaluation of bone mineral density and testosterone levels on tooth loss – A Pilot Study

Singh Balendra Pratap, Tripathi Arvind & Singh SV, Indian J. Stomatol. 2012.

This paper deals with the physical status of the maxilla and the mandible as related to the endocrinological status and the relationship of these two factors with tooth loss. It brings forth the interesting finding that osteopenia and osteoporosis precipitate a biochemical and biomechanical breakdown of bone structure which hastens tooth loss.

Effect of sociodemographic variables on complete denture satisfaction

Singh Balendra Pratap, Pradhan Kedar Nath, Tripathi Arvind, Tua Reema and Tripathi Shuchi. J Adv Prosthodont, 2012

Complete denture rehabilitation cuts across all lines of social and economic status. The present paper deals with the level of education, social awareness, and self esteem and the consequent level of satisfaction, both functional and esthetics in patients rehabilitated with complete dentures

Full mouth rehabilitation of severely worn dentition: a case report.

Singh R, Tripathi A, Singh GP, Singh SV. J Internat Coll Dent 57(1):29-32, 2012

Aesthetic and functional restoration of severely worn dentition presents a significant clinical challenge. One of the most demanding aspects of such cases involves the development of sufficient restorative space, while simultaneously fulfilling aesthetic, occlusal, and functional parameters essential to long-term successes. This paper focuses on the fixed prosthetic treatment options for such patient and utilization of fixed restorations to create inter-occlusal space.

Evaluation of the properties of a tissue conditioner containing origanum oil as an antifungal additive

Akansha Srivastava BDS, Kishore Ginjupalli, MSc, PhD, Nagaraja Upadhy P, MSc, PhD, Nishant Bhat, MSc and Mamta Ballal MSc, PhD. JProsthet Dent 2013; 109

Adherence and colonization of *Candida albicans* on tissue conditioners is common and result in irritation of the denture bearing mucosa. The purpose of this study was to investigate the antifungal activity and properties of a tissue conditioner by incorporating origanum oil. Origanum oil at varying concentrations was incorporated into a poly(methyl methacrylate) based tissue conditioner(Visco-gel) and its antifungal activity against *Candida albicans* was evaluated at 1 day and 1 week by using the agar punch well method. The adherence of *Candida albicans*, surface roughness, tensile strength and bond strength of the tissue conditioner with an optimized origanum oil concentration were evaluated. The data were subjected to 2-way ANOVA ($\alpha = .05$). Sixty vol% origanum oil in tissue conditioner (visco-gel) showed a mean inhibitory zone of 21.00 ± 1.58 mm at 1 day and 13.44 ± 0.88 mm at 1 week. The control group showed 90 ± 6.80 yeast cells/mm² at 1 day and 165 ± 7.63 yeast cells/mm² at 1 day and 32 ± 4.00 yeast cells/mm² at 1 week. Surface roughness was less with incorporation of origanum oil. Tensile strength at day 1 was 0.91 ± 0.52 N for the control group, where the group with origanum oil showed 0.16 ± 0.05 . at day 1 the bond strength of 3.39 ± 0.75 MPa was observed with control specimens, whereas tissue conditioner with origanum oil showed a bond strength of 3.73 ± 0.65 MPa. Within the limitations of this in vitro study, origanum oil can be used as an additive to tissue conditioner to reduce the adherence of *Candida albicans* without significantly affecting its bond strength to heat-polymerized acrylic resin

Alginates: A Review of Compositional Aspects of Dental Applications

Akanksha Srivastava, Jalise Aaisa, T A Tarun Kumar, Kishore Ginjupalli*, P Nagaraja Upadhy Department of Dental Materials, Manipal College of Dental Sciences, Manipal University, Manipal – 576104, Kamataka, India. *Trends Biomater. Artif. Organs, 26(1), 31-36 (2012)*

Alginate is an elastic irreversible hydrocolloid, widely used for recording the impressions of dentulous arches, impressions for making models for diagnostic purposes, and for duplication of casts. Today, their use far exceeds the use of all other impression materials in general dental practice because of their hydrophilicity, ability to record finer details and sufficient elastic recovery. Over the years, several modifications have been done to improve their clinical performance. Modified alginates in form of dust free, self-disinfectant and chromalginate have already been in the clinical practice and have shown their superiority over the conventional alginates. In addition to these modifications, other modifications have been introduced to further improve their clinical acceptance. This review is an overview of the evolution of dental alginate impression materials with an emphasis on the material aspects.

Department of Public Health (Community) Dentistry

The Staff

Readers

Dr. Pervez A Razak, M.D.S., *Head of the Department*



Dr. Pervez A. Razak

Senior Lecturers

Dr. Dr. Gaurav Mishra, M.D.S.

Lecturers

Dr. Poonam Singh, B.D.S.

Dr. Anamika Verma, B.D.S.

The Charter

The Department of Public Health Dentistry is dedicated to meet the health needs of community through available knowledge and resources. The services provided by the department cover full range of preventive, curative and rehabilitative services for the rural population with no cost what-so-ever to the people through:

- Satellite Centers, which are dental clinics
- Regular dental health care programs/camps
- School dental checkup programs
- Awareness programs using charts, personal interviews and models to provide comprehensive oral health care.

The department has an airconditioned MOBILE DENTAL VAN equipped with a dental chair with all attachments required for functioning, a basin, a wooden almirah for keeping instruments and materials, public address system, generator and a compressor to make all specialty services available to the rural population at their doorstep.

During the year, the Department of Public Health Dentistry organised a total of 78 diagnostic/treatment Camps in villages, schools, higher education institutions, offices and residential colonies in and around the city of Lucknow. A total of 13134 persons attended these camps.

Membership of Scientific Societies and Committees

Faculty Name

Scientific Society

Dr. Gaurav Mishra

Life Member, Indian Association of Public Health Dentistry

Member, Indian Dental Association

Member, International Association of Public Health Dentistry

Brief write-up of published papers

Prevalence of periodontal disease among engineering students in the Lucknow city (U.P.)

Mishra G, Shaikh H. Journal of Indian Academy of Dental Specialists Researchers 1(3):6-9, 2012

The present study was done with an attempt to assess the prevalence of periodontal disease among engineering students in Lucknow city (U.P.) A descriptive cross-sectional study was conducted on randomly selected 505 engineering students in age group 19 to 26 years using a self structured proforma. Community Periodontal Index was used for examination of subjects. The statistical analysis was done using SPSS software version 12.0. Frequency, percentage and comparison of males and females were done using the chi-square test. Majority (95.05%) of the subjects cleaned their teeth by using toothbrush. Very few of the subjects used twig (3.56%) and fingers (1.39%) for cleaning teeth. More than half 326 (64.55%) had calculus, 166(32.87%) had bleeding gums, 12(2.38%) had pocket 4-5 mm. However only 1(0.20 %) had pocket >6 mm. In all the age groups majority of the subjects had higher prevalence of calculus followed by bleeding. Only in the age group of 19-20, shallow pockets in 12(9.3%) and deep pockets in 1(.8%) subject were seen. In both males and females, majority of the subjects 99.8% had healthier scores in terms of

loss of attachment. Majority of the subjects cleaned their teeth by using toothbrush & toothpaste. In all the age groups majority of the subjects had higher prevalence of calculus followed by bleeding. There was no association found between gender and periodontal disease. Overall prevalence of periodontal disease was 2.58%.



Section II (contd.)

Departmental Achievements

B. Medical & Basic Sciences

Department of Anatomy

The Staff

Professors

Dr. AK Srivastava, Ph.D., *Head of the Department*



Dr. A.K. Srivastava

Lecturers

Dr. Devendra K Singh, B.D.S

The Charter

At the undergraduate level, the Department of Human Anatomy, Embryology & Histology offers teaching gross anatomy of the face, neck region, oral cavity, nasal cavity, pharynx, brain and spinal cord with references to attachment of cranial nerves to the brainstem, detailed study of cranial nerves with nuclei, comparative study of fetal skull and adult skull; development, ossification, age changes and evaluation of mandible in detail, organ of special senses, practical demonstrations and assignments on different aspects of the subject. Embryology including development of face, palate, nasal septum and nasal cavity, paranasal air sinuses, salivary glands, pharyngeal apparatus, tooth with age changes. Congenital anomalies of face in details, study of the microscope and other laboratory instruments, cell and its organelles, epithelium of oral cavity and respiratory tract, types of tissues, histological examination of tissues of various systems like cardiovascular system, nervous system, integumentary system, respiratory system, gastrointestinal system, urinary system, reproductive system, lymphatic system, endocrine system, organs of special senses under normal conditions, histological techniques, stains and staining techniques (acid/basic/ neutral), hematoxylin, eosin, orcein, silver and gold impregnation, osmotic acid, Von Kossa, Periodic Acid Schiff, Aldehyde Fuchsin, Sudan Dyes, Oil Red O, Methylene Blue, Giemsa, Best's Carmine, Feulgen Nuclear Reaction, Alcian Blue, Janus-Green B, Weigert Stain, Azan, Gomori Phloxine Stain etc.

At the postgraduate level, the department offers teaching on growth & development of head, neck and face, development of jaw bones with age changes, vessels supply of head and neck, content of orbits, side, back and triangle of neck, temporal and infratemporal fossa, nose and paranasal sinuses and practical demonstrations of hard and soft parts of human body, temporomandibular joints, model on masticating muscles, development of tongue and face, heart and teeth, staining techniques and provides necessary guidance and facilities for dental departments.

Brief write-up of published papers

Effect of electromagnetic radiation of mobile phone on sperm morphology in albino rats

Singhal P, Srivastava AK, Chopra J, Mahdi AA, Srivastava AK. *J Anat Sci* 20(2):58, 2012 (Abstract only)

Now-a -days cell phones have become an essential part of our lives & its use is not only restricted to voice conversation but also for conveying news, high resolution pictures & internet. These technological advances are associated with progressive increase in intensity & frequency of emitted electromagnetic waves. Some studies have reported that electromagnetic waves have adverse effect on male reproductive system. The present study was carried out to see possible effect of electromagnetic radiation on sperm morphology. Twelve male albino rats were divided into two groups (6 each). Animals of both the groups were housed in polythene cages under standard conditions of temperature & light & were provided with standard pellet diet & water ad libitum. In experimental group animals were exposed to electromagnetic radiation by placing a mobile phone over the cage for 5 hours per day for 2 months. Mobile phone was turned to answering mode for ½ hour per day. After 2 months, animals of both the groups were sacrificed & sperm morphology assay was done. Different types of abnormalities observed were double head, banana head, amorphous head, defective head, headless, bent neck, bent tail, double tail, defective tail & looped tail. In control group abnormal sperm count was 5% whereas in the experimental group it was 39 %. Thus it proves that mobile phone radiation have harmful effect on male reproductivity.

Department of Biochemistry

The Staff

Professors

Dr. Alka Yadu, M.Sc., Ph.D., *Head of the Department*



Dr. Alka Yadu

The Charter

At the under-graduate level, the Department of Biochemistry offers teaching, practicals, seminars and assignments to provide the students with sound knowledge on various concepts of Biochemistry which are applied to Dental sciences to make them conversant with the principals and clinical application of Biochemistry.

The lectures cover structure and properties of amino acids, peptides and proteins and introduction to the nature of enzymes and enzymatic reactions, vitamins, mineral metabolism, whole body metabolism, biological carbohydrates, fats, nucleic acids and protein synthesis.

The practicals include estimation of blood sugar, blood cholesterol, urine analysis, identification of carbohydrates, amino acids, gastric juice analysis etc.

The seminars are presented by the students under the guidance of faculty on the topics allotted to groups of 5 students each so as to train them for PowerPoint presentations and enhance their knowledge about the subject.

At the post-graduate level, all the above topics are dealt with in greater detail depending on their speciality.

Ongoing research projects

A. Faculty

Differential DNA hypermethylation of critical genes and its correlation in development of oral cancer

Principal Investigator: Dr. Alka Yadu

Co-Investigators: Dr. RM Mathur, Dr. Shikha Tiwari, Dr. SK Goel

Assessment of DNA methylation status of Tumor Suppressor Gene in precancerous lesion and oral cancer patients

Principal Investigator: Dr. Alka Yadu

Co-Investigators: Dr. Nitin Agarwal, Dr. Shikha Tiwari, Dr. Vikram Bhatia, Dr. Madhumati Goel

Ph.D. thesis work

Mr. Vikram Bhatia

Promoter region hypermethylation of critical genes and mi RNA levels in oral cancer and precancerous lesions

Supervisor: Prof. Madhumati Goel, Department of General Pathology, CSMMU, Lucknow

Co-Supervisor: Dr. Alka Yadu

Department of General Pathology & Microbiology

The Staff

Professors

Dr. Asha Mathur, M.D., *Head of the Department*



Dr. Asha Mathur

Senior Lecturer

Dr. Abhineet, M.D.S.

Dr. Alka Kaushik, M.D.

Lecturers

Dr. Apurva K Srivastava, B.D.S., M.Sc.

Dr. Digwijay Singh, B.D.S.

Dr. Anjum Parvez, B.D.S.

The Charter

At the undergraduate level, the Department of Pathology & Microbiology offers teaching (General Pathology, Bacteriology, Immunology, Virology, Parasitology, and Mycology), practical demonstrations and assignments on different aspects of the subject. This includes study of the microscope and other laboratory instruments, sterilization techniques, culture media preparation, blood culture, fungal culture, throat swab culture (using Nutrient agar, Blood agar, Mac Conkey's agar etc.) and patient sensitivity, bacterial identification tests, microfilaria, malarial parasite, Ascaris and other intestinal parasites, stool examination, Gram staining, acid fast staining, VDRL test, WIDAL test, antibiotic sensitivity test, ELISA, different immunological tests, routine blood and urine tests and histopathological examination of different tissues under normal and pathological conditions. At the postgraduate level, the department offers teaching and practical demonstrations on culture and staining techniques and provides necessary guidance and facilities for microbiological work such as preparation of Platelet Rich Fibrin PRF), clinical predilection of transmission of microflora from tooth to implant, estimation of salivary secretory immunoglobulin A, *Streptococcus mutans* count and salivary sodium, potassium levels, blood examination (Hb%, TLC, DLC), urine examination for protein, sugar, occult blood, ketone bodies etc., histopathological slides of normal and pathological specimens e.g., malignancies, inflammatory changes and blood films like anemia and leukemia.

Ongoing research projects

A. Faculty

Prevalence of human Epstein barr virus in periodontal diseases

Principal Investigator: Dr. Asha Mathur

Co-Investigators: Prof. TN Dhole (SGPGIMS, Lucknow), Dr. RM Mathur

B. Dissertation of M.D.S. students

Dr. Amit Sidana

Quantitative changes in cariogenic streptococci and subgingival microbiota in patients before and during orthodontic treatment

Supervisor: Dr Ragni Tandon

Co-Supervisors: Dr. Asha Mathur, Dr. Shrish Charan Srivastava

M.D.S. Dissertation submitted

Dr. Amol Santosh Hedao

Clinical prediction of translation of microflora from tooth to osteointegrated implant

Supervisor: Dr. LC Gupta

Co-Supervisors: Dr. RS Bedi, Dr. GP Singh, Dr. Asha Mathur

Dr. Neha Saxena

Estimation of salivary secretory immunoglobulin A, Streptococcus mutans count, salivary sodium, potassium levels in caries free, and caries active children: A case control study

Supervisor: Dr. Rachana Bahuguna

Co-Supervisors: Dr. Suleman Abbas Khan, Dr. Asha Mathur, Dr. SN Malhotra

Membership of Scientific Societies and Committees

Name

Membership details

Dr. Asha Mathur

Member, Sectional Committee, Indian National Science Academy (INSA), New Delhi, 2012-2015

Brief write-up of published papers

Japanese Encephalitis Virus: The complex biology of an emerging pathogen

Saxena SK, Tiwari S, Saxena R, Mathur A, Nair MPN. In: Encephalitis, Tkachev S (Ed.), InTech, Croatia (European Union), Chapter 10, pp. 161-180, 2013 (doi: 10.5772/54111; ISBN: 978-953-51-0925-9)

Japanese encephalitis virus (JEV) is a flavivirus, which is an emerging threat globally, majorly being southern and Southeast Asia and Australia. Even though most JEV infections are asymptomatic, it is estimated that only 0.3% leads to disease causing and results in over 35,000 cases including 10,000 deaths annually worldwide, and remaining cases which somehow escape death produce permanent sequelae, proving to be as a persistent threat (Singh et al., 2012). The human infections caused by encephalitic flaviviruses are more often asymptomatic or they cause mild febrile illness but sometimes this low percentage of mild infection turns into a dangerous and life-threatening encephalitis. The conditions which support viral survival are concerned to both viral and host factors that allow virus entry from the blood into the central nervous system (CNS). Host factors play important role in disease susceptibility. Japanese encephalitis, caused by JEV which belongs to arthropod-borne virus family and transmitted through Culex mosquito, is centrally a pediatric disease which causes acute infection and inflammation of the brain. Historically, in 1817 JE was first identified in Japan, but the causative agent (JEV) was later isolated from a fetal human case in 1934 (Erlanger et al., 2009). First report of JE in India was in 1955, and since then this deadly virus has engulfed thousands of lives and has shaken several economies. The total numbers of cases reported annually are about 35,000-50,000 (Zheng et al., 2012). Out of these reported cases ~30-50 % patients suffer from neurological sequelae and ~20-40 % cases turn to be fatal (Nett et al., 2009). The actual counts are still higher than reported due to lack of reach of technology and surveillance towards extreme rural areas, which contain more vulnerable and needy population. The natural cycle of JEV consists of pig-mosquito-pig or bird-mosquito-bird (van den Hurk et al., 2009) circulation of virus. When an infected mosquito bites a healthy individual, it may lead to febrile illness or a severe meningoencephalomyelitis illness which is life taking. The incidence of the disease intensifies in rainy season as the environment supports the viral growth because of temperature, moistness and dampness which are plus factors letting the virus to bloom and flourish (Saxena et al., 2008). Today the need is to fight against this reemerging virus by the aid of high level of immunization and therapeutic and preventive measures to slow down the spread of the disease amongst human population.

Detection of a neutrophil chemotactic factor in Japanese encephalitis patients

Singh A, Kulshrestha R, Mathur A. J Pharmaceut Sci Innov 1(6):23-26, 2012

Japanese encephalitis (JE) one of the most common cause of acute encephalitis in tropical regions, has generated much public anxiety in India. An early influx of macrophages followed by neutrophils at the site of injury in different organs in humans and mice has previously been reported. It correlated with production of a neutrophil chemotactic protein derived from macrophages. In the present study out of a total of 324 acute encephalitic patients, admitted in Gandhi memorial and associated hospitals, Lucknow, 121 patients with one or more indicators of JE virus infection were included. Significant pleocytosis (mean TLC value of 126 ± 52 cells / mm^3) in CSF and leucocytosis ($>11,000$ cells/ mm^3) in peripheral blood was observed at the time of admission. The leucocytosis increased significantly during second week in 67% of patients. The peripheral blood mononuclear cells culture done on alternate days was tested for

chemotactic activity (hMDF), which was observed to be highest in second week of illness. The direct detection of hMDF in circulation by dot blot was positive in 92% of acute serum samples, with negligible (12.5%) reactivity for convalescent sera. A correlation between the hMDF levels and severity of illness has also been observed.

Department of Pharmacology

The Staff

Professors

Dr. KM Dhasmana, M.B.B.S., M.D., *Head of the Department*



Lecturer

Dr. Mohan Das, M.B.B.S., M.D., D.I.H.

The Charter

The Department of Pharmacology deals extensively with the drugs used in the treatment of different ailments pertaining to dental patients. In addition, the Department offers lectures, practicals, demonstrations and assignments on the following aspects:

- General pharmacology, autonomic pharmacology
- Drugs acting on central nervous, cardiovascular and gastrointestinal systems
- Endocrine glands, hormones, vitamins and chelating agents
- Chemotherapeutic effects of different antimicrobials with special emphasis on their uses and adverse effects as well as, the pharmacotherapy of common oral conditions
- Agents and chemicals used in dental practice as a special subject
- Practical knowledge for preparing gum paints, astringents and life saving formulations of life saving drugs

Seminars are presented by groups of students under the guidance of faculty on randomly selected topics to enhance their knowledge about the subject.

Department of Physiology

The Staff

Professors

Dr. KL Dange, M.D., *Head of the Department*



Dr. KL Dange

The Charter

At the under-graduate level, the Department of Physiology offers teaching of physiology in lectures, practicals, demonstrations, assignments and seminars on different aspects of the subject. This includes:

- Study of Microscope and other Laboratories Instruments
- Study of hematology and practical testing of total RBC, total WBC, differential leukocyte count, ESR, hemoglobin, bleeding time, clotting time and blood sugar levels
- Teaching and practical of ECG, Spirometry, Blood Pressure Pulse and reflexes
- Teaching of nerve muscle conduction and heart on kymograph and charts
- Lectures on all systems of body viz., CNS, CVS, respiration, GIT, reproduction, family planning, excretion, endocrine, skeletal and autonomous nervous systems with special reference to senses, skin and temperature regulation.

At the post-graduate level, all the above systems are taught in greater detail depending on their area of specialisation of the students.

Geriatric Oral Health Unit

Department of Prosthodontics & Dental Materials

A Geriatric Oral Health Unit was inaugurated at the Saraswati Dental College & Hospital on 06 Jan 2013 by Mrs. Madhu Mathur, Vice-Chairman, Saraswati Group of Institutions. The Department of Prosthodontics & Dental Materials is the first in the country to successfully operate a Geriatric Oral Health Unit.



Geriatric oral health

Why is good oral health important for residents in long-term care facilities?

- Geriatric oral health and overall health are closely related.
- Poor oral hygiene is associated with the increased incidences of pneumonias.
- Many medications can cause dry mouth, which increases the risk of dental caries.
- Diabetic glucose control is poorer in the presence of gum disease and gum disease is worse in diabetic patients, especially in those with poor glycemic control.
- Poor oral health is a common cause of weight loss and failure to thrive.

The Geriatric oral health unit intends to cater to the specific oral health needs of the old and the infirm. Aging brings with it a derangement in physical and mental state and consequent dependence for activities of daily living. Psychosocial issue such as physical and financial insecurity, fear of ostracises and abandonment and depression are common afflictions of the geriatric population. This leads to self apathy and neglect and personal hygiene. The alarming revelation about the relationship of poor oral hygiene and predilection to cardiac and respiratory disease has necessitated a concerted effort at maintenance of oral health and the hygiene of all types of oral prosthesis. Further in caregiver institutions, the nursing staff is often negligent to the protocols of assistance in oral health care. Hence training module for them also need to be evolved.

What is the goal of Geriatric Oral Health unit?

This program addresses the vital role health-care professionals can play in promoting the oral health needs of older adults. Health-care professionals will learn how to perform a comprehensive oral assessment, identify and manage common geriatric oral conditions, counsel residents on effective preventive measures and collaborate with dental professionals. Additionally, this program will address the link between oral and systemic health and review common oral side effects of medications. Training and teaching of postgraduates in this component will enhance the technical capabilities of student. Till now our team has successfully motivated and treated **15** geriatric patients under the geriatric oral health care unit at Saraswati Dental College & Hospital.

Oral Cancer Detection & Research Centre

Inauguration by

Mr. Kamal Haasan & Ms. Pooja Kumar

22 Dec 2012



Oral Cancer Detection & Research Centre (OCDRC)

Department of Oral & Maxillofacial Pathology

Cancer of the oropharyngeal region is the sixth most common malignancy and a major health challenge in countries like India where an estimated 56,000 new cases of oral cancer occur every year. The high prevalence of this disease in the Indian subcontinent is directly related to the high prevalence of tobacco consumption in either chewable or smoked form. Traditionally tobacco has been consumed in India as an ingredient of beetle quid (popularly known as Pan) along with herbs and other condiments. Tobacco is a known carcinogen and its effect is potentiated by other additives like lime, and areca nut. Over a last few decades quid chewing is being replaced by use of quid substitutes popularly known as “pan masala” which are dried mixtures of quid components with or without tobacco. These are readily available, cheap, dispensed in small disposable sachets and hence easy to carry, which has made them extremely popular among general population and alarmingly even in teenagers and females.

Despite numerous advances in treatment, the 5-year survival has remained approximately 50% for the last 50 years. Poor survival among oral cancer patients can be attributed to the advanced extent of the disease at the time of diagnosis, with over 60% of patients presenting in stages III and IV. These statistics are disheartening as almost 90% of oral malignancies primarily arise in the surface oral epithelium that is readily accessible to direct visual and tactile examination and majority of these lesions are preceded by morphological alterations in the oral mucosa. In part, this may be due to an incomplete understanding or awareness that even small asymptomatic lesions can have significant malignant potential. Another factor which might play a role is the fact that even after detection of precursor changes it is extremely difficult to clinically ascertain the exact nature of these changes as lesions with visually similar appearance can have dramatically different potential for malignant conversion. With advances in understanding of diseases at molecular and genetic level newer diagnostic aids utilizing this knowledge in diagnostic pathology is becoming the need of the hour. Immunohistochemistry has become the backbone of molecular diagnosis as well as research and development activity including those for oral cancer. A well developed molecular diagnostic facility can help both the clinicians and pathologists in making decisions regarding the possible outcome of a clinically suspicious lesion and will help in rendering a more precise and accurate treatment to the patient. This would be even more beneficial if such a facility is available at a location which could cater a large population especially of rural and suburban areas. With these thoughts the Department of Oral and Maxillofacial Pathology, Saraswati Dental College, Lucknow has established an Oral Cancer Detection and Research Centre (OCDRC) to help make some contribution towards tackling the menace of oral cancer by early detection and prevention.

Aims & Objectives

- Create a nodal centre for screening of oral cancer and potentially malignant oral diseases for rural and semi-urban areas around Lucknow.
- Act as a referral centre for diagnosis of oral cancer and pre-cancer using conventional and molecular diagnostic aids.
- Create a nodal centre for conducting research and development activity for developing tools for early detection and prevention of oral cancer.
- Reduce the mortality and morbidity rates associated with oral cancer through early detection using advanced molecular aids.

College Topper : M.D.S.



Dr. Robin Srivastava

S/o Dr. RP Srivastava

Highest Marks in College (68.33%) in 2012

Specialisation: Periodontics

University & College Toppers : B.D.S.



Miss Sneha Mehrotra

D/o Mrs. Nisha & Mr. Raj Kumar Mehrotra

University Topper across all Four Professional (73.44%)

Joint College Topper in Fourth Professional (73.44%)

Highest marks in Pedodontics & Orthodontics in the College & Distinction in Orthodontics, Public Health Dentistry & Periodontics in Fourth Professional

Smt. Vijaylakshmi Khun Khun ji Award for Best Student of the Year in Class 10 in La Martiniere Girls' College, Lucknow (2004)



Miss Paridhi Mehra

D/o Mrs. Neeta & Mr. Manoj Mehra

University Second Topper across all Four Professional (73.39%)

Joint College Topper in Fourth Professional (73.44%)

Highest marks in Periodontics & Oral Surgery in the College & Distinction in Orthodontics, Periodontics & Community Dentistry in Fourth Professional

Amongst the top three in First, Second & Third Professional



Miss Prarthana Dalmia

D/o Mrs. Nivedita & Mr. Alok Kumar Dalmia

University & College Topper in Third professional (75.33%)

Highest marks in General Surgery & Oral Pathology & Distinction in General Surgery, Oral Pathology & General Medicine

Also University Second Topper & College Topper in Second Professional (2011-12)



Miss Vandana Chauhan

D/o Mrs. Shanti & Mr. Chandra Bhan Chauhan

University Topper (80.25%) in Second Professional

Highest marks in Pharmacology in the University & Distinction in Pharmacology, Prosthodontics & Conservative Dentistry in Second Professional

Also College Topper with Highest marks in the University in Dental Anatomy & Histology in First Professional (2010-11)



Miss Vandita Raj

D/o Mrs. Kavita & Mr. Rajesh Chandra Srivastava

College Topper in First Professional (76%)

Highest marks in Dental Anatomy, Dental Histology, Human Anatomy, Physiology & Biochemistry in the College

Distinguished Visitors and Lectures

Ms. Raushan Zafar, Assistant Professor, Saraswati Institute of Technology & Management, Lucknow delivering a lecture on 'HR practices and team building for BDS Final year students, Interns and PG students' on 07 April 2012



Dr. Pooja Khurana visited the College on 21 Dec 2012

Clockwise from top left: In Principal's Office with Dr. RS Bedi, Dr. GP Singh and Dr. RM Mathur, In Geriatric Oral Health Unit with Dr. Arvind Tripathi, interacting with Dr. GP Singh, Head, Department of Community Dentistry and Dr. Man Mohan Singh, Research Advisor and inside the Mobile Dental Van



Mr. Kamal Haasan & Ms. Pooja Kumar

22 Dec 2012



Section III : Major Events Organized

Flag Hoisting; 26 January 2013

Clockwise: Dr. RM Mathur, Dounder Principal & Director HR, Saraswati Dental College hoisting the National Flag, Students singing the National Anthem, Dr. RM Mathur and Dr. RS Bedi, Principal addressing the gathering, the staff and representatives of Four Houses of the College



Blood Donation Camp

Held at Saraswati Hospital & Research Center on 22 Nov 2012
The camp was sponsored by Rotary Club, Lucknow



Rotaract Club Saraswati

ROTARACT CLUB SARASWATI meeting being held on 21 April 2012.



Dental Camp & Mobile Dental Van

Clockwise from top left: Dental Camp held in Bhatehta, Dist., Barabanki village on 22 Jan 2013; village folk being examined for oral health status; Mobile Dental Van with the dentists explaining proper technique of tooth brushing and patients being examined for oral health status



Health Mela at Saraswati Dental College & Hospital

A 'Health Mela' was organised at the Saraswati Dental College & Hospital from 31 Oct - 03 Nov 2012 for free check up, awareness, advise and treatment of oral diseases. A large number of students from local academic institutions and people from rural, sub-urban and urban areas in and around Lucknow attended.

*Inauguration by Lt. Col. (Dr.) TS Mathur (Rtd.)
Chairman, Saraswati Group of Institutions*



Hospital Ambulance for free transport of patients



Registration, check-up & treatment of patients



**Tree Plantation at Saraswati Dental College
23 Sept 2012**



Meeting the Village Pradhans

05 Oct 2012



Clean & Clear Time Fresh Face Competition

Organized by the Times of India at Saraswati Dental College, Lucknow on
17 Oct 2012



Freshers' Party

A Freshers' Party was organised at the Saraswati Dental College & Hospital on 25 Jan 2013 to welcome the new batch of students joining B.D.S. course at this institution. Both the fresh as well as the senior batch of students participated with full enthusiasm.



Local Sightseeing for First Year Students

A full-day sightseeing trip to historical places in the city of Lucknow was organised for the entire batch of First Professional students on 09 Jan 2013. The students accompanied by responsible faculty members were taken around on the College Bus. Pictures below show the students going around the 'Bara Imambara' with its famous 'Bhulbhulaiya' on the top.





College Week

College Week was organised from 18-23 Feb 2013. Inter-House Literary, Sports and Cultural competitions were held from 18-21 Feb 2013 and Prize Distribution Ceremony was held on 23 Feb 2013.

Saraswati Houses

College Captain : Ravi Kumar

College Vice-Captain : Farhan Malik

Houses

| Raman | Chawla | Tagore | Krishnan | Captains |
|----------------------|--------------------------|-----------------------|---------------------|----------------------|
| Gulab Kharwar | Harsh Puri | Pragati Pandey | Rahul Singh | Vice-Captains |
| Arvind Pal | Vishwajyoti Singh | Shubhaya Roy | Peter | |
| Shreya Panwar | Astha Khurana | Shreya Mathpal | Arpita Singh | |

Impressions

18-23 Feb. 2013



Impressions














18-23 Feb. 2013



The Saraswati Alumni

Saraswati Dental College has a strong and ever progressive list of its alumni holding the flag of the college high. Saraswati Dental College has produced more than 1000 alumni from the college who are placed at various prestigious institutions and establishments like the Army Dental Core, Oral B Inc, ICICI Lombard and various colleges nationally and internationally. The alumni of the college have been authors to various text books for reputed publishers and have delivered orations internationally.

Dr. Ashish Mathur
President (Saraswati Alumni Association)

| | | | |
|---|--|---|---|
|  |  |  |  |
| (Dr.) Neeraj Kumar, 2011 Colonel, Army Dental Corps | (Dr.) Eklavya Tak, 1998 Lt. Colonel, Army Dental Corps | Dr. Ronak Singh, 2010 Major, Army Dental Corps | Dr. Rahul P. Singh, 1998 Major, Army Dental Corps |
|  |  |  |  |
| Dr. Alindra Mathur, 1999 Captain, Army Dental Corps | Dr. Saurabh Sarraf, 1999 Product Head, Oral-B, U.K. & Ireland | Dr. Durvesh Kr. Yadav, 2002 Dental Consultant, Safai Institute of Medical Sciences | Dr. Ajit V. Parihar, 1998 Assist. Prof., BHU Varanasi |
|  |  |  |  |
| Dr. Rajat Singh, 2000 Assistant Professor, BHU, Varanasi | Dr. Fahad Islahi, 1999 MD & CEO, Metro Hospital | Dr. Shweta Mathur, 1999 Chief Dental Consultant Apollo Hospital, New Delhi | Dr. M. R. Mathur, 1999 Project Coordinator, Govt. of India, New Delhi |
|  |  |  |  |
| Dr. Ravi Madan, 1998 Reader, Kothiwal Dental College, Moradabad | Dr. Dheeraj Gupta, 2000 Dental Consultant, National Rural Health Mission | Dr. Satish Norem, 2000 Assistant Professor, JN Inst. of Med. Sciences, Imphal | Dr. Kamal Kapoor, 1999 Manager, ICICI Lombard Gen Insurance, Lucknow |
|  |  |  |  |
| Dr. Meeta Bhatt, 2003 Dental Consultant, ECHS Polyclinic (Indian Army) | Dr. Shantanu Dayal, 2004 Associate Clinician, Family Dental Centre Alaska (USA) | Dr. Vikram Singh, 1999 Assistant Professor, Bharti Vidyapith, Pune | Dr. Anuroop Prakash, 1999 Captain, Army Dental Corps |

Acknowledgements

We thank the Management, Heads of the Departments, Faculty, Staff and Students for providing necessary input for inclusion in this Annual Report.

Dr. Man Mohan Singh
Editor

Dr. R.S. Bedi,
Chief Editor

Ranked as the **NO. 1** Private Dental College in
NORTH INDIA (Outlook Magazine)



ALL INDIA RANKING 2011

| Rank | Name of Institute | P : Pvt. G : Govt. | City | Overall score (1,000) |
|-----------|---|-----------------------|----------------|-----------------------|
| 1 | Manipal Colleges of Dental Sciences | P | Manipal | 907.5 |
| 2 | Maulana Azad Inst. of Dental Sciences | G | Delhi | 900.0 |
| 3 | Govt. Dental College & Hospital | G | Mumbai | 800.3 |
| 4 | SDM Colleges of Dental Sc & Hospital | P | Dharwad | 800.2 |
| 5 | Bapuji Dental College & Hospital | P | Davangere | 781.4 |
| 6 | Govt. Dental College & Research Inst. | G | Bangalore | 777.2 |
| 7 | Government Dental College | G | Rahtak | 774.1 |
| 8 | Dr. R. Ahmed Dental College | G | Kolkata | 747.4 |
| 9 | SRM Dental College | P | Chennai | 731.1 |
| 10 | Govt. Dental College and Hospital | G | Aurangabad | 719.0 |
| 11 | Tamil Nadu Govt. Dental College | G | Chennai | 718.7 |
| 12 | Saraswati Dental College | P | Lucknow | 706.0 |
| 13 | Faculty of Dental Sc, IMS | G | Varanasi | 685.7 |
| 14 | A.B. Shetty Memorial Inst of Dental Sc. | P | Mangalore | 652.2 |
| 15 | Army College of Dental Sciences | P | Secundarabad | 629.6 |



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