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<tr>
<td>1.</td>
<td>Dr.Yogender Singh</td>
<td>Evaluation And Comparison of Healing of Periodontal Flaps when Approximated</td>
<td>Interdisciplinary Periodontics</td>
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<td></td>
<td>(2013-2016)</td>
<td>with Silk Sutures and N-Butylcyanoacrylate: A Clinico-Histological Study</td>
<td>Guide: Dr. H.S. Grover</td>
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<td>Guide: Dr. Mini Saluja</td>
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<td>Co-guide: Dr. H.S. Grover</td>
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<td>ABSTRACT</td>
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<td>Aim: To assess and compare plaque accumulation and gingival tissue response</td>
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<td>to N-butyl-2-cyanoacrylate &amp; silk suture, when used for approximation of flap</td>
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<td>after periodontal surgery.</td>
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<td>Materials and Methods: A total of 30 subjects diagnosed with chronic Periodontitis were included in the study. A split mouth design was employed, in which quadrants were randomly assigned as control group (silk suture used for flap approximation) and the test group (NBC used for flap approximation). Clinical evaluation was done at baseline, 1st, 3rd &amp; 6th weeks and histological assessment was done by dividing the subjects into 3 groups of 10 each i.e. A, B and C.</td>
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<td>Results: A highly statistically significant increase in Plaque scores and</td>
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<td>Gingival Index scores was found at first week (p&lt; 0.001) in silk group as</td>
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<td>compared to cyanoacrylate group. Although gingival inflammation was found to</td>
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<td>be significantly more in silk group up to third week clinically as well as</td>
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<td>histologically, but at sixth week no difference was evident between two</td>
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<td>groups. Conclusion: Thus, it was concluded that N-butyl-2-cyanoacrylate leads</td>
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<td>to the lesser plaque accumulation and a better gingival tissue response as</td>
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<td>compared to silk suture, during initial phase of healing.</td>
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<td>Keywords: Periodontal Surgery, N-Butyl-2-Cyanoacrylate, Silk Suture.</td>
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**ABSTRACT**

Interdisciplinary Dentistry can be described as the mutual permeation of various dental specialties accompanied by expansion of the scope of each. Interdisciplinary Dentistry is marked by the application of perspectives, concepts and methods that go beyond the limits of individual specialties. Interdisciplinary Dentistry may either be interpreted in a very narrow sense as the actual fusion of specialties, or in a wider sense as a multidisciplinary phenomenon in which independent specialties work jointly to resolve a problem, each from its own conceptual viewpoint. Periodontal health is the “sine qua non” a prerequisite, of successful, comprehensive dentistry. The normal periodontium provides the support necessary to maintain teeth in function. It consists of four principal components: Gingiva, Periodontal ligament, Cementum and Alveolar bone. Essentially these structural components must be in excellent health in order to provide successful periodontal support. This library dissertation discusses the importance of interdisciplinary approach for treatment planning so as to preserve biological environment while maintaining or restoring aesthetics, comfort and function. The real art of dentistry is to co-ordinate and interface these perspectives and provide the best quality of care to the patient.

Keywords: Interdisciplinary periodontics, multidisciplinary, periodontitis
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<tr>
<th>2.</th>
<th>Dr. Rohit Saini (2013-2016)</th>
<th>Correlation between Periodontitis and Renal Function in Systemically Healthy Patients</th>
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<tr>
<td>Guide:</td>
<td>Dr. H. S. Grover</td>
<td>Immunology of periodontal diseases</td>
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<td>Co-guide:</td>
<td>Dr. Anshu Blaggana</td>
<td>ABSTRACT:</td>
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**ABSTRACT**

**Introduction:** Periodontal disease is a microbial-induced infection, so there exists a substantial infectious burden for the entire body by the release of bacteria, bacterial toxins, and other inflammatory mediators into the bloodstream. Recent reports also suggest the periodontitis may be associated with reduced renal function which ultimately leads to chronic kidney disease which is a progressive loss in renal function.

**Materials and Methods:** The subjects for the study were selected with age ranging from 30 – 60 years (mean age 45.6 ± 10.2 years) of both sexes who were undergoing routine blood examination. They were then assessed for their periodontal health status. To assess the kidney function, four markers were recorded in both groups including: serum creatinine, serum urea, serum uric acid and estimated glomerular filtration rate. The results of kidney function tests and eGFR were then compared in both the groups with appropriate statistical analysis and conclusions were drawn.

**Results:** All the clinical parameters were highly significant on comparison between cases and controls. Our results demonstrated that patients with periodontitis did not suffer any alteration in levels of indicators of kidney function relative to control group and furthermore these markers stayed within their normal range in both groups suggesting that severe periodontitis does not affect renal function. Within the limitations of study and methodology utilized, chronic periodontitis is not associated with any alteration in kidney function in the studied population.

**Discussion:** In our study we did not include patients with established kidney disease but rather assessed kidney function in systemically healthy patient with or without...
periodontitis. The results are coinciding with published data showing that dogs having mild, moderate or severe periodontitis in dogs had normal renal function, assessed by serum levels of creatinine, urea and by urine density. This study does not include patients with established kidney disease but rather assessed kidney function in systemically healthy patient with or without periodontitis.

**Keywords:** Periodontal disease, kidney function, eGFR,

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<th>3. <strong>Dr. Shweta Dikshit (2013-2016)</strong></th>
<th>Whole Saliva Levels of Some Inflammatory Mediators-(Myeloperoxidase, Alkaline Phosphatase, Interleukin 1 B) Pre And Post Phase I Therapy In Subjects With Chronic Periodontitis: A Clinico-Biochemical Study .</th>
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| **Guide:** Dr. Anshu Blaggana  
**Co-guide:** Dr. H.S. Grover, Dr. Veenu Hans Madan, Dr. Megha Maheshwari | Optical coherence tomography applications in periodontology |
| **ABSTRACT**  
**Background:** A major factor for tooth loss observed globally as well as in Indian adults is periodontitis. Hence identification and treatment of the disease process at an early stage is imperative to prevent it. Salivary biomarkers are an early indicator of disease process and this paper aims to establish their validity by evaluating the whole saliva levels of some inflammatory mediators viz., Myeloperoxidase, Alkaline Phosphatase and Interleukin1B ,pre and post Phase I therapy in subjects with chronic periodontitis.  
**Materials And Methods:** Thirty subjects with chronic periodontitis provided saliva at baseline (before Phase I therapy) and 3weeks and 8 weeks post treatment. Clinical parameters viz., Plaque index (PI), Pocket proving depth (PPD), Bleeding on probing (BOP) and Clinical Attachment loss (CAL) were recorded along with biochemical assessment of the saliva samples collected at all pre designated time intervals employing ELISA.  
**Results:** Participants with periodontitis demonstrated significantly higher plaque index (PI),
Pocket probing depth (PPD), Bleeding on probing (BOP) and Clinical Attachment loss (CAL) at Baseline and a significant drop in these parameters 3 and 8 weeks post-treatment. (p<0.001). Following Phase I therapy, mean biomarker concentrations decreased significantly from baseline, p <0.001). **Conclusions:** Salivary Myeloperoxidase, Alkaline Phosphatase and Interleukin1β significantly decreased in chronic periodontitis patients post Phase I therapy thus indicating a positive correlation between the various periodontal parameters and the currently available salivary diagnostics.

**KEY WORDS:** Biomarkers, Chronic periodontitis, saliva.

decay, and structural integrity of dental restorations.

**Keywords:** Dental, Medical, OCT Periodontitis, Caries.

| 4. Dr. Nitin Kaushik  
(2013-2016) | Association Of Maternal Periodontitis In Women Delivering Pre-Term, Low Birth Weight and Pre-Term Low Birth Weight Infants- A Cross Sectional Study |
| Guide: Dr. H.S. Grover  
Co-guide: Dr. Akshay Munjal | Evidence based periodontology  
Guide: Dr. H.S. Grover |

**ABSTRACT**  
**Objective:** It has been suggested that periodontal disease is an important risk factor for preterm low birth weight (PLBW). The purpose of this study was to
determine the association of maternal periodontitis with preterm birth (PB), low birth weight (LBW) and preterm low birth weight infants (PTLBW). 

Materials and Methods: Pregnant women (n=500) aged 18-46 were examined and enrolled by visiting hospital's maternity wards. The periodontal examination and birth weight of the neonate were recorded within 72 hours after delivery. Probing pocket Depth and Clinical Attachment were recorded for all teeth present in the dentition except third molars. 

Results: This study showed that when periodontal health status of the mothers was assessed based on maternal age, the total incidence of periodontitis and health were 424 (84.8%) and 76 (15.2%) respectively. The incidence of 14 preterm birth neonates were (18.4%) mothers delivering preterm neonates were periodontally healthy and 110 (25.9%) suffered from some form of periodontal disease, the incidence of low birth weight were according to maternal age were 55 (72.4%) mothers were having no periodontal disease whereas 258 (60.8%) suffered from some form of periodontal disease and also the incidence of preterm and low birth weight neonates were 7 (9.2%) mothers delivering preterm low birth weight neonates were having no periodontal disease whereas 56 (13.2%) suffered from some form of periodontal disease.

Conclusion: Statistical analysis showed there was no statistical significance found in adverse pregnancy outcomes in mothers whether they suffered from periodontal diseases or not but clinically there was a weak association between periodontitis and adverse pregnancy outcomes. This may be due to non suitable periodontal case definition used in our study and the risk of confounders such as socioeconomic status, nutrition, obesity, exercise, stress etc.

Keywords: pre-term neonates, low birth weight neonates, periodontitis, pregnancy

Now the practice of dentistry is becoming more complex and challenging because of the continually changing in dental materials and equipments, an increasing litigious society, an increase in emphasis of continuing professional development, In keeping abreast with advances in dentistry, we are inundated with information about new techniques, tests, procedures, materials and products. Two phenomena - information explosion and consumer movement, both of which are fortified by the extraordinary advancement of the internet, are coming together to change the way all businesses including health care will function in the future.

Keywords: evidence based, periodontitis, advances in dentistry
| 5. | Dr. Himanshu Deswal  
(2013-2016) | **Efficacy Of Diode Laser As Adjunct To Scaling And Root Planing in the Treatment of Chronic Periodontitis: A Comparative Clinical Study**  
**Guide:** Dr. Amit Bhardwaj  
**Co-guide:** Dr. H.S. Grover  
**ABSTRACT**  
Background: In present study the use of Diode Laser (800-980nm) with or without conventional scaling and root planing (SRP) was compared for treatment of periodontal pockets.  
Methods: 40 patients with Probing Pocket Depth of 5 to 9 mm were included. In a split-mouth design, each site was allocated to a treatment group: 1) SRP and 2) SRP+Diode Laser. Clinical parameters of pocket probing depth (PPD), bleeding on probing (BOP), and clinical attachment level (CAL) were evaluated at baseline, 1 month and 3 months after treatment. Inter-group and intra-group statistical analyses were performed.  
Results: PPD was decreased for both the groups (P <0.001) at 1 month and 3 months after treatment. BOP also decreased for both SRP and SRP+Diode Laser group. There was significant gain in CAL for SRP+Diode Laser (P <0.0001) at 1 month and 3 months post-operatively.  
Conclusion: Non-surgical periodontal treatment with Diode laser is useful as an adjunctive treatment to SRP for reduction of pocket depth and for the improvement clinical attachment level as well Periodontitis patients.  
**Keywords:** Laser, Periodontitis, Adjunct Therapy, Scaling And Root Planing.  
| 6. | Dr. Pearl Bhardwaj  
(2014-2017) | **Assessing the antimicrobial efficacy ( against Prophyromonas gingivalis) of Green tea brewed at various concentrations, time combinations and its comparison with various commercially available mothwashes**  
**Guide:** Dr. H.S. Grover  
**Co-guide:** Dr. Mini Saluja, Dr. Akshay Munjal  
**Periodontal Splinting**  
**Guide:** Dr. H.S. Grover  
**Phytotherapeutic and naturopathic adjunct therapies in periodontology**  
**Guide:** Dr. H.S. Grover  
**ABSTRACT**  
The oral cavity is the principal pathway through which the body is exposed to external environment and considered to be the gateway of infection. Oral diseases continue to be a major health problem worldwide. Dental caries and periodontal diseases are among the most important global oral health problems, although conditions such as oral and pharyngeal cancers and oral tissue lesions are also significant health concerns. Despite general advances in the overall health status of the people living in industrialized countries, including oral and dental health. Naturopathy system of Medicine is a system of healing science stimulating the body’s inherent power to regain health. Naturopathy is a call to “Return to Nature” and to resort to simple way of living in harmony with the self, society and environment. Naturopathic dentists believe that healthy teeth and gums are reflective of a healthy body, and vice versa. Naturopathic dentistry will treat the symptoms of unhealthy teeth but also look to identify and then treat the cause of the affliction.  
**Keywords:** Phytotherapeutic, Naturopathic, Adjunct Therapies,Periodontology |
ABSTRACT

Introduction: Periodontal disease has an infectious inflammatory etiology. Several periopathogens have been identified to which the destruction is attributed. Of these Porphyromonas gingivalis has several pathogenic factors. Camellia sinensis is the plant whose leaves are used to produce green tea. The polyphenols, a large group of plant chemicals that includes the catechins, are responsible for the antimicrobial benefits attributed to green tea. Aims and Objective: To test the antimicrobial efficacy of various concentrations of green tea brewed for various time intervals at 90°C against periopathogen Porphyromonas gingivalis. Material and Methods: Green tea was measured with an electronic weighing machine and brewed at 90°C to obtain fifteen concentration time combinations. Pure culture of Porphyromonas gingivalis was obtained from subgingival plaque samples by inoculating them on a culture media specific for Porphyromonas gingivalis. The antimicrobial properties of green tea were tested using paper disk diffusion. The mean values of zones of inhibition thus obtained were used for comparing the antibacterial properties of brewed green tea with commercial mouthwashes. Discussion: Various preventive protocols have been advised for control of periodontitis. Inspite of their benefits, their chemical nature offers many drawbacks such as microbial resistance and opportunistic infections. Thus they cannot be advised for a long period of time. Green tea on the other hand is consumed on daily basis by patients and instead of drawbacks offers additional health benefits. As green tea provides similar benefits as these commercially available mouthwashes, in plaque reduction, it is a breakthrough in preventive oral health care. Keywords: P. gingivalis, green tea, antimicrobial, paper disc diffusion

7. Dr. Saumya Saluja

Comparative evaluation of radiographic mandibular Periodontium meet restoration: A friend or an enemy
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<th>(2014-2017)</th>
<th>bone quality, bone mass quality and clinical periodontal parameters in Pre- and post menopausal women</th>
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<td>Guide: Dr. Anshu Blargina</td>
<td>ABSTRACT Introduction: Osteoporosis is defined as a systemic skeletal disease characterized by low bone mass and micro architectural deterioration of bone tissue, this generalized bone resorption throughout the body usually affects elderly women i.e. during menopause. The present study involves the assessment of mandibular bone in terms of both quantity and quality based on the study done by utilizing radiologic and clinical parameters. Aims &amp; Objectives: To study the periodontal status and prevalence of periodontal status in pre- and post menopausal women alongwith the bone mass and quality in pre- and post menopausal women. Thereby establishing the correlation between periodontal status and bone mineral density (osteoporosis) in pre- and post menopausal women. Materials and Methods: 150 females will be selected within an age range of (22-65 years) reporting to the Department of Periodontology. Female patients, based on their menstrual history and periodontal assessment, females will be divided into four groups and will be subjected to both clinical and periodontal parameters. Panoramic radiographs will be taken for all the subjects using the same Orthopantomograph. All the findings will be subjected to statistical analysis. Key words: pre menopausal post menopausal, osteoporosis,resorption, Orthopantomograph</td>
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<td>Guide: Dr. H.S. Grover</td>
<td>A healthy Periodontium constitutes the foundation for a successful restorative as well as prosthetic treatment. Therefore, we come across the concept of “Periodontium and Restoration”. Knowledge in periodontology has evolved at a very rapid pace in the past decade, including new knowledge about the structure and function of periodontal tissues. This work discusses regarding the requirement of successful integration of periodontal and restorative dentistry for both natural teeth and prosthesis as they require knowledge and application of both mechanical and biological principles. All phases of clinical dentistry are intimately related to a common objective of preservation and maintenance of the natural dentition in health. In an integrated multidisciplinary approach to dental care, it is logical that periodontal treatment precede final restorative procedures. For restorations to survive long-term, the periodontium must remain healthy so that the teeth are maintained. For the periodontium to remain healthy, restorations must be critically managed in several areas so that they are in harmony with their surrounding periodontal tissues. The integration of periodontal considerations with restorative planning is now the standard of care. Direct and frequent communication between the periodontist and restorative dentist is a prerequisite for predictable and satisfactory results. Key words: Dentist, Periodontium, periodontist, Restoration</td>
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Clinical and radiographic evaluation of 1% Metformin gel with platelet rich fibrin in mandibular class II furcation defects.

Guide: Dr. H.S. Grover
Co-guide: Dr. Veenu Hans Madan

ABSTRACT

Introduction: Platelet-rich fibrin (PRF) is a second generation platelet concentrate that releases various growth factors that promote tissue regeneration. Metformin (MF), a member of biguanide group, has been shown to facilitate osteoblast differentiation and thus may exhibit a favourable effect on alveolar bone.

Aim: The current study is designed to assess the efficacy of open flap debridement (OFD) with PRF and PRF+1% MF gel in the treatment of mandibular Grade II furcation defects in patients with chronic periodontitis.

Method: A total of 30 sites with Grade II furcation in mandibular molars will be categorized in two equal groups for surgical procedure. OFD with PRF and OFD with 1% MF gel+PRF. Clinical parameters as site specific PI, sulcus bleeding index (SBI), PD from the gingival margin, relative vertical attachment level (RVAL) and relative horizontal attachment level (RHAL) along with gingival marginal level (GML) at baseline and 6 months postsurgery. RVG image (Sirona® Germany) will be used for comparative evaluation of defect at baseline and 6 months.

Results: Statistical analysis will be carried out using appropriate test via a suitable software after collection of all the data.

Keywords: Metformin, Platelet Rich Fibrin, Alveolar Bone, Osteoblast differentiation.
| 9 | Dr. Tabeyadeep Kaur (2015-2018) | Exploration of association between Chronic Periodontitis and Sleep Deprivation and evaluation of this inter-relationship with Stress Hormone (Cortisol) Levels: A Clinico-immunological study  
**ABSTRACT**  
**Objectives**: to explore the association between Chronic Periodontitis and Sleep Deprivation ii) to evaluate this inter-relationship with stress hormone (cortisol) levels.  
**Study Design**: Present study was divided in two phases: Phase-I and Phase-II. The Study sample consisted of 100 patients who were diagnosed as chronic periodontitis patients according to the criteria of the 1999 International Workshop on the Classification of Periodontal Diseases conducted by the American Academy of Periodontology. All subjects participating in the study signed a consent form to willingly participate in the study. Appropriate medical and dental history was evaluated for each subject. All data was collected in the presence of the trained examiner in the local language or language suitable for the participant.  
**Phase-I of the study**  
The patients who were diagnosed as chronic periodontitis patients were included in Phase-I of the study. Probing Pocket Depth (PPD) was measured with UNC-15 probe for the diagnosis of Chronic Periodontitis. They were asked to fill Pittsburgh Sleep Quality Index (PSQI) for estimation of Sleep deprivation.  
**Phase-II of the study**  
In phase II there was the estimation of serum cortisol levels by the CLIA method from an authorized laboratory.  
**Keywords**: sleep apnoea, periodontitis, cortisol | Supportive Periodontal Therapy (in progress)  
Guide: Dr. H.S. Grover |
|---|---|---|
| 10 | Dr. Arshiya (2015-2018) | Evaluation of Interleukin (IL)-35 levels in Gingival Crevicular Fluid (GCF) of Chronic Periodontitis Patients following Non-Surgical Periodontal Therapy (Scaling & Perio-esthetics (in progress)  
Guide: Dr. H.S. Grover |
ABSTRACT
Introduction: Chronic Periodontitis is an inflammatory condition of the supporting tissues of the teeth caused by microorganism that stimulates the host immune and inflammatory response, which is characterized by the infiltration of the tissues by neutrophils, macrophages, B cells and T cells and the generations of high concentrations of locally, produced cytokines and other mediators. Cytokines play a major role in initiation as well as progression of inflammatory response arrested by periodontal therapy. Among the body fluids, gingival crevicular fluid (GCF) provides a unique non-invasive method for the analysis of the periodontal condition. Aim: Co-relation of Interleukin (IL) -35 levels in Gingival Crevicular Fluid (GCF) with the resolution of inflammation after non-surgical periodontal therapy (Scaling & Root planing) in chronic periodontitis patients. Materials And Method: Total of 20 subjects, age group of 35-65 yrs of both the sexes diagnosed with chronic periodontitis with atleast 20 natural teeth present, probing pocket depth ≥4 mm in 30% of the sites, clinical attachment loss (CAL) ≥1mm in 30 % of sites with radiographic evidence of bone loss will be included in the study. Results: Results will be statistically analysed

Keywords: Gingival Crevicular Fluid, Cytokine, Interleukin35.
ABSTRACT

Introduction: A variety of surgical techniques have been developed throughout the years and among these the coronally advanced flap (CAF) is a root-coverage technique which is being used extensively because of its high success rate, safety, predictability & superior aesthetics. However, few authors have documented much stable, long term outcomes on using CAF in conjunction with GTR membrane. A variety of non-resorbable and bioabsorbable occlusive membranes have been used in the past. One of the oldest biomaterials used as a scaffold is the foetal membrane. Therefore, in this study we aim to compare one of the established gold standard techniques of root coverage that is coronally advanced flap (CAF) alone vis-à-vis chorion membrane with Demineralized Freeze Dried Bone Allograft (DFDBA) and amnion membrane with DFDBA for treating gingival recession defects. Aim: To comparatively evaluate the clinical efficacy of coronally advanced flap (CAF) alone vis-à-vis chorion membrane with Demineralized Freeze Dried Bone Allograft (DFDBA) and amnion membrane with DFDBA for treating Miller’s class I & II gingival recession defects. Material and Methods: The sample size will consist of 30 sites, (10 for each group i.e. group 1(Control Group): recession defects treated with Coronally Advanced Flap only with vertical releasing incisions , group II (1st Test group): recession defects treated with chorion membrane allograft in conjunction with DFDBA bone allograft with coronally advanced flap , group III (2nd Test group): recession defects treated with amnion membrane allograft in conjunction with DFDBA bone allograft with coronally advanced flap), presenting Miller’s Class I and Class II gingival recession greater than or equal to 2 mm in depth and width, which shall be surgically treated. Results: Results thus obtained will be put to statistical evaluation. Keywords: Gingival recession, chorion Membrane, amnion membrane, demineralized freeze-dried bone allograft,

Guide: Dr. Amit Bhardwaj  
Co-guide: Dr. H.S. Grover  

**ABSTRACT**  
**Introduction:** Role of various etiologic factors in periodontal disease has been investigated by means of epidemiologic surveys and clinical studies. The community periodontal index of treatment needs (CPITN) provides a picture of the public health requirements in the periodontal field, which is essential for national oral health policy-making and specific interventions.  

**Materials and Methods:** This study was conducted on 4000 individuals among rural, semi-urban, and metro population of Gurgaon District, Haryana State, to find out the oral health status and periodontal treatment needs (TNs) using CPITN index.  

**Results:** An inference was drawn from the results that among 4000 participants from all the four population groups’ maximum, i.e., 63.80% of individuals needed TN2 whereas 18.20% of individuals needed TN3 and 18.10% of individuals needed TN1.  

**Conclusion:** It can be concluded with a word of hope and a word of warning. Hope lies in the fact that the measurement of periodontal diseases by epidemiological study of this condition is improving and receiving wide spread attention. The warning lies in the varied nature of the condition which goes to make up periodontal disease and perplexing ways in which these conditions blend. In addition to dental practitioner, periodontist and public health workers must devote more time and effort toward controlling periodontal disease than they seem to be devoting at present.  

**Keywords:** epidemiology, urban population, sub-urban population, metropolitan, CPITN,  

|  | Risk assessment of periodontal disease  

Guide: Dr. H.S. Grover  

**ABSTRACT**  
Chronic periodontitis is a multifactorial disorder. Effective disease management should include identification of risk factors for periodontitis and an assessment of disease risk due to these factors. Based on available evidence it can be concluded that careful analysis of the data is needed before assigning any variable as a true risk factor for periodontal disease. An accurate diagnosis can only be made by a thorough evaluation of data that have been systematically collected by patient interview, medical consultation, clinical examination, radiographic evaluation and laboratory test as need.  

**Keywords:** risk factors, diagnosis, risk assessment.
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<th>Dr. Name</th>
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|13.| Dr. Pankaj Chaudhary     | Comparative evaluation of occluding effectiveness of Nd:YAG, CO₂ and Diode lasers on exposed human dentinal tubules: An in vitro Scanning Electron Microscopic study. | Dr. Mini Saluja     | Dr. H.S. Grover        | ABSTRACT
|   | (2012-15)                |                                                                      |                     |                        | Introduction: dentinal hypersensitivity is one if the most frequent problems causing discomfort. Recently, diode laser has been presented as a potential alternative for the treatment of dentinal hypersensitivity. Materials and Methods: root specimens were obtained from extracted human premolars. Four sections were prepared from a single tooth and thus 40 specimens were obtained and then randomly divided in 4 different groups. Grp I: control, treated with saline, Grp II: Nd:YAG laser, Grp III: CO₂ laser and Grp IV: 810-nm diode laser. Results & Conclusion: all three lased groups showed more effective occlusion of dentinal tubules other than control group Keywords: dentinal hypersensitivity, laser, tubule occlusion. |
|14.| Dr. Ajita Singh          | Effect of subgingivally delivered 1.2mg simvastatin on the levels of interleukin-6,8, and10 in gingival crevicular fluid of chronic periodontitis patients. A clinic biochemical study. | Dr. H.S. Grover     | Dr. Anshu Blaggana     | ABSTRACT
|   | (2012-15)                |                                                                      |                     |                        | Introduction: Cytokines are pivotal to the immune response of chronic periodontitis. The present study investigated the changes of gingival crevicular fluid (GCF) interleukin-4 (IL-4) and interferon-gamma (IFN-gamma) in patients with chronic periodontitis before Oral malodour: where we stand today |
|   |                          |                                                                      | Guide: Dr. H.S. Grover |                        | ABSTRACT
|   |                          |                                                                      | Co-guide: Dr. Anshu Blaggana |                        | Halitosis is a term used to define an unpleasant odour emanating from the mouth. Oral malodour arises from microbial degradation of organic substrates like glucose, mucins and peptides in saliva, GCF and retained debris. Organoleptic assessment by a trained judge is considered the |
and after initial nonsurgical periodontal therapy (NSPT). GCF was collected from 17 patients by means of Peripaper at baseline and 1 month after NSPT. IL-4 and IFN-gamma were measured by enzyme-linked immunoabsorbent assay. NSPT resulted in decreased total amount of IFN-gamma, increased concentration of IL-4, and increased ratio of IL-4 to IFN-gamma levels. We suggest that a low ratio of IL-4 to IFN-gamma levels might be involved in the destruction (diseased sites) of periodontal tissue, whereas an increased ratio of IL-4 to IFN-gamma levels could be related to the improvement of clinical periodontal health.

**Keywords:** simvastatin, Interleukin, elisa

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The treatment of halitosis should be cause related. Chemical reduction of oral microbial load can be obtained by using mouthrinses with antimicrobial agents.

**Keywords:** malodour, mouthrinse, organoleptic.

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**15. Dr.Neha Saini (2012-15)**

**Detection and Measurement of Oral Malodor in Chronic Periodontitis Patients and its Correlation with levels of select Oral Anaerobes in Subgingival Plaque.**

**Guide:** Dr. Anshu Blaggana  
**Co-guide:** Dr. H.S. Grover

**ABSTRACT**

**Introduction:** Oral malodor is generally ascribable to oral microbial putrefaction generating malodorous volatile sulfur compounds. The aim of the present study is to correlate organoleptic recordings with a small handheld portable volatile sulfide monitor and periodontal clinical parameters and correlate the levels of halitosis causing bacteria in plaque between baseline, 1-week, and 1-month.  

**Materials and methods:** A total of 20 systemically healthy subjects with self-reported halitosis were subjected to organoleptic examination and FitScan®. Subgingival plaque samples for anaerobic culturing were harvested followed by an assessment of plaque index (PI), gingival bleeding index (GBI), and pocket probing depth. Data derived were subjected to statistical analysis using Wilcoxon signed rank test and Spearman’s rank test (P < 0.05).  

**Results:** No correlation was seen between organoleptic measurements and portable volatile sulfide monitor at any time interval. There was a statistically significant (P < 0.05) correlation between the scores of PI, gingival gold standard in the examination of malodour. The treatment of halitosis should be cause related. Chemical reduction of oral microbial load can be obtained by using mouthrinses with antimicrobial agents.

**Keywords:** biomimetics, periodontal regeneration, alveolar defects.
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<th><strong>Index, GBI, and myeloproliferative disease with organoleptic readings at all-time intervals. Anaerobic culture has shown to identify Fusobacterium species, Porphyromonas gingivalis, Prevotella intermedia, Tannerella forsythia. However, no correlation could be established in between total microbial load with organoleptic and FitScan(®) reading at any time interval (P &lt; 0.05). Conclusion: Significant correlation could be established between organoleptic readings and periodontal parameters. Keywords: Anaerobic microflora; malodor; organoleptic; portable sulfide monitor; volatile sulfur compound</strong></th>
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</table>
|   | **To determine and compare the labial gingival thickness (Biotype) in two major racio-ethnic groups of Indian population using Ultrasonographic Method – A Clinical Study.**
| **ABSTRACT** | **Guide: Dr. H.S. Grover**
**Co-guide: Dr. Anshu Blaggana**  
**Introduction:** gingival biotype can affect the results of periodontal therapy, ultrasonographic determination is a rapid, atraumatic, non-invasive technique. **Material and Methods:** A total of 100 patients of both genders were divided into two groups ANI and ASI on the basis of racio-ethnicity. **Results:** no significant difference in the gingival thickness was seen in both groups. **Conclusion:** A reliable ultrasonographic method was devised to reveal significant variation in the gingival biotype. **Keywords:** gingival biotype, ultrasonography, racio-ethnicity** |
| **16.** | **Dr. Neha Saksena**  
 **(2012- 15)** |
| **17.** | **Dr. Kartika Chawla**  
 **(2012- 15)** |
|   | **Analysis of the qualitative shift in the periodontal microbiota using Polymerase Chain Reaction-based test (micro-l Dent® plus) in patients undergoing fixed orthodontic mechanotherapy.**
| **ABSTRACT** | **Guide: Dr. H.S. Grover**
**Co-guide: Dr. Amit Bhardwaj**  
**ABSTRACT**  
**Wound healing in periodontal therapy**
**Guide: Dr. H.S. Grover**
**ABSTRACT**  
**Periodontal healing is a complex process requiring coordinated**

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<td><strong>Critical issues in periodontal research</strong></td>
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|   | **Guide: Dr. H.S. Grover**
**Periodontal research is increasing nowadays. Various number of scientific papers are published highlighting the various aspects of periodontal research methodology. There are still current issues which need to be emphasized in both basic and clinical periodontal research methodology. The purpose of this review paper is to summarize the unresolved issues pertaining to prevalence, etiology, pathogenesis, diagnosis and therapy in periodontology.**  
**Keywords: Current issues, periodontics, research** |
| Introduction | Osteotomy timing of the implant surgical site: A comparative study of early osteotomy with delayed implant placement (2 weeks) and conventional implant placement. 
Guide: Dr. Adosh Lal
Co-guide: Dr. H.S. Grover, Dr. Anil Yadav
ABSTRACT
Introduction: the replacement of missing teeth is carried out frequently with implants these days. Current trends have revealed the need for faster restoration using implants. Aim: the aim of the study was to compare the efficacy of early osteotomy with delayed placement and conventional implant placement using RVG. Materials and Methods: the study included 9 patients with 24 healthy sites and were randomly divided into 2 groups of 12 sites each. Group I had subjects treated with conventional implant placement and Group II had subjects with early osteotomy and delayed implant placement. Results: All implants in both control and test group had no significant difference in implant stability quotient values, indicating that all implants achieved excellent primary and secondary stability. Keywords: delayed implant placement, implant stability, osseointegration |
| Role of viruses in the pathogenesis of periodontal disease |
Guide: Dr. H.S. Grover
ABSTRACT
Periodontal disease is attributable to multiple infectious agents. Recently, it has been suggested that certain viruses also influence the development and severity of periodontal disease. Several studies show association between HIV, HCMV, EBV and HCM-EBV co-infection and some distinct forms of periodontal infection. Viral infections are difficult to treat since current anti-viral drugs are only virustatic and viral pathogens are developing sophisticated methods to exclude the toxic effects of drugs. Drug therapy is therefore limited but occasionally successful and is often relegated to palliative care. Keywords: virus, periodontal pathogenesis, antiviral therapy |
<p>| Dr. Prateek Gupta (2011-14) | Comparative evaluation of calcium phospho silicate putty with and without platelet rich plasma in periodontal intrabony defects using computer assisted responses involving gingival epithelium and connective tissue, PDL, cementum and bone. To attain the new attachment scientific basis were given to understand the various wound healing factors involved in periodontal regeneration. These factors include early clot stabilization, epithelial exclusion, root surface modification and reduced PDL. These different types of regenerative procedures and mediators may increase the probability for regeneration of lost periodontal tissues. Keywords: wound healing, repair, regeneration |
| Dr. Sagrika Shukla (2011-14) | Comparative evaluation of calcium phospho silicate putty with and without platelet rich plasma in periodontal intrabony defects using computer assisted Important of collagen in periodontal health &amp; disease |</p>
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<tr>
<th>Dr. Shruti Maroo</th>
<th>Comparison of Coronally advanced flap technique with and without using orthodontic buttons in the treatment of Miller Class I and II recession defects- A clinical study.</th>
<th>Unraveling the periodontium at a molecular level</th>
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<td>Dr. H.S. Grover</td>
<td>Guide: Dr. H.S. Grover</td>
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<td>Co-guide:</td>
<td>ABSTRACT</td>
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<td>ABSTRACT</td>
<td>In periodontal disease, rate of alveolar bone loss can be slow or continuous or episodic and can manifest as horizontal or angular. Materials and Method: Non-randomized clinical trial was designed in a split mouth fashion containing a total of 40 intrabony defect sites in 20 patients suffering from chronic periodontitis. Group I had 20 sites treated with open flap debridement and Novabone putty while group II had open flap debridement and novabone plus PRP. Results: novabone putty alone is a good bone graft material and mixing it with PRP does not greatly enhance bone density outcomes. Keywords: intrabony defects, PRP, Novabone putty.</td>
<td>Collagen is the most abundant protein in mammals and every tissue contains collagen. Less than 40 years ago, only one type of collagen was known. Since then, due to advances in medical field, about 29 types of collagen and collagen like proteins are known. It occurs as fibrils, microfibrils and networks. Many natural polymers and their synthetic analogues are used as biomaterials. Collagen is used as collagen shields, sponges, mini-pellets and tablets, gel formulations and nanoparticles for gene delivery. In surgery, it is used as surgical suture, haemostatic sutures and tissue engineering as scaffolds. Keywords: collagen, tissue, biomaterials.</td>
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<td>20. (2011-14)</td>
<td>Introduction: Esthetics has become an essential criterion of the overall treatment plan in dentistry that comprises of a healthy and beautiful smile at any age. Multidisciplinary approach involving orthodontics and periodontics results in the maintenance of a beautiful smile and a healthy periodontium. The continuous endeavor for innovation of newer interdisciplinary treatment modalities has resulted in the use of a passive object like the orthodontic button being used to provide the initial stabilization in cases of root coverage using a Coronally advanced flap (CAF). Objective: The objective of this case report is to evaluate the effectiveness of a new treatment approach which consists of coronally advanced flap (CAF) procedure combined with</td>
<td>During the last decade progress has been made to understand the molecular and cellular biology of the periodontium. Today’s knowledge of periodontal disease is not based on a direct succession of events, but rather a synthesis of theories and discoveries. Results of recent studies have suggested that periodontal regeneration recapitulates the process of morphogenesis, histogenesis and cytodifferentiation that occurs during the development of the periodontium. Advances made in the fields of molecular biology, human genetics and stem cell biology have set the stage for significant discoveries that will pave the way for the development of procedures needed for the predictable regeneration of periodontal tissues. Keywords: molecular biology, histogenesis.</td>
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orthodontic button application for the treatment of Miller’s class III recession defects. **Methodology:** After the application of orthodontic buttons in middle third of tooth surface, a split-full split flap was raised from tooth #22 to #24 and the flap was sutured 3 to 4 mm coronal to cementoenamel junction and the central part of flap was suspended with sutures to the orthodontic button to maximize the stabilization of the immediate postoperative flap location. Clinical parameters were recorded at 1 and 3 months postoperatively. **Results:** Complete root coverage was achieved when evaluated from baseline to 3 months along with gain in clinical attachment level and keratinized tissue. The final esthetics, both color match and tissue contours, were highly acceptable.

**Keywords:** CAF, CAF with orthodontic button, recession coverage

Introduction: the systemically dispersed bacteria from periodontal lesion produce an acute phase response resulting in the production of CRP. **Material and Method:** 30 systemically healthy patients with chronic periodontitis were selected. The patients underwent an intensive session of subgingival mechanical instrumentation. Blood samples were taken before treatment, at day one, one week and one month after treatment. **Results:** CRP increased upto 10 fold one day after treatment and settled to baseline values 1 month post-treatment. **Keywords:** C reactive protein, acute inflammatory response. | Periodontal microsurgery Guide: Dr. H.S. Grover ABSTRACT Historically, periodontal microsurgery has had its origin in the development of reconstructive gingival surgery. It is an evolution of surgical techniques to permit reduced trauma and improve healing. Microsurgery offers new possibilities to improve periodontal care in a variety of ways. Benefits of microsurgery include improved cosmetics, rapid healing and minimal discomfort and enhanced patient acceptance. Microsurgery presents special challenges in dexterity and perception. Its execution is technique sensitive and more demanding than conventional periodontal procedures. **Keywords:** microsurgery, reconstructive gingival surgery |
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<th>Author(s)</th>
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<td>22.</td>
<td>Dr. Sanjay Lal (2010-13)</td>
<td>Patient’s response and recurrence following gingival depigmentation using laser and scalpel technique: A clinical study.</td>
<td><strong>ABSTRACT</strong>&lt;br&gt;Aim: The present study was undertaken to evaluate patient response and recurrence of pigmentation following gingival depigmentation carried out with a surgical blade and diode laser. <strong>Materials And Methods:</strong> Twenty patients who were esthetically conscious of their dark gums and requested treatment for the same were selected for this study. Complete phase I therapy was performed for all the patients before performing the gingival depigmentation procedures with laser and scalpel on a split-mouth basis. Patients were evaluated for pain (1 day, 1 week), wound healing and melanin repigmentation (Melanin Pigmentation Index) immediately and at 1 week, 1 month and 3 months, respectively. <strong>Results:</strong> The final results were statistically analyzed and significance was evaluated. The results of this study indicated that both scalpel and laser were efficient for gingival depigmentation. Comparative pain assessment (P = 0.148) and repigmentation scores (P = 0.288) at various time intervals between the two groups did not show any statistical significance. <strong>Conclusion:</strong> Both the procedures did not result in any post-operative complications and the gingiva healed uneventfully. When compared, both the techniques were found to be equally efficacious. Care must be taken to assess the gingival biotype and the degree of pigmentation in deciding which technique is to be used.</td>
<td><strong>Keywords:</strong> Diode lasers; gingiva; melanin pigmentation; pathologic; physiologic; scalpel surgery</td>
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<td>23.</td>
<td>Dr. Yaswin Singh (2010-13)</td>
<td>Clinical evaluation of the efficacy of two commercially available controlled-release drugs – Chlorhexidine Gel</td>
<td><strong>Medical emergencies in dental practice</strong>&lt;br&gt;<strong>Guide:</strong> Dr. H.S. Grover&lt;br&gt;<strong>ABSTRACT</strong>&lt;br&gt;Medical emergencies can and do happen anywhere at anytime and that includes dental offices. Medical emergencies are very stressful events. Under these types of conditions, anxiety and confusion can exist as well as the inability to recall proper treatment protocols. Many facilities have an emergency drug kit but are not familiar with its contents. The dentist and the entire team need to be proficient in handling these emergencies until EMS arrives.</td>
<td><strong>Keywords:</strong> medical emergency, emergency kit</td>
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Selective removal or inhibition of pathogenic microbes with locally delivered antimicrobials, combined with scaling and root planning (SRP) is an effective approach for the management of chronic periodontitis. **Aim:** Evaluation of the efficacy of two commercially available controlled release drugs - tetracycline fibers (periodontal plus AB TM) and chlorhexidine gel (CHLO-SITE TM) as an adjunct to SRP in the treatment of chronic periodontitis. **Materials and Methods:** Twenty systemically healthy patients in the age group of 30-50 years suffering from generalized chronic periodontitis were selected. Three experimental sites were chosen that had probing depth 5-8 mm in maxillary and mandibular posterior segment. First site receiving tetracycline fibers, other chlorhexidine gel and one site was taken as control after SRP. Plaque score, bleeding score, probing pocket depth (PPD), and relative attachment level (RAL) gain were recorded on baseline, 1 month and at the end of 3 months. **Results and Conclusion:** In all groups, there was statistically highly significant reduction in all the clinical parameters that is plaque score, bleeding score, PPD, and RAL gain were seen at different time intervals. Inter-comparison shows that tetracycline fibers and chlorhexidine gel are equally efficacious for treatment of chronic periodontitis, but more efficient than SRP alone. **Keywords:** local drug delivery, tetracycline fibers, chlorhexidine gel

**ABSTRACT**

Chronic periodontitis is the result of a response of the host to bacterial aggregations on the tooth surface. Progression and severity of the disease depends on the complex interactions between several risk factors such as microbial, immunological, environmental and genetic factors. The utilization of tobacco products has long been linked to periodontal disease. Cigarette smoking alone does not cause periodontal disease but aggravates the clinical conditions. There is clear association between smoking and both the existence and severity of periodontal diseases. **Keywords:** Tobacco, progression of disease.
ABSTRACT
The preservation of the hard and soft tissue complex in the esthetic zone following the loss of one or more teeth presents an intimidating and highly visible restorative challenge. Collapse of the hard and soft tissues following tooth extraction is frequently associated with significant resorption, remodeling, and deformity. This study describes a surgical technique for the preservation of anterior esthetics combining minimally invasive or flapless extraction with immediate implant placement.

Keywords: Implant; Restoration; immediate implant

ABSTRACT
Surgical debridement and regenerative procedures are the traditional treatment modalities used to improve periodontal disease parameters and arrest its progression. GTR has proved to be more effective than open flap debridement in the gain of clinical attachment. Several options are available for GTR and grafting materials. Clinicians need to be able to select the proper cases for appropriate treatment.

Keywords: GTR, open flap debridement.

25. Dr. Prashant Nanda (2008-10)
A comparative evaluation of the efficacy of citric acid, ethylene diamine tetra acetic acid (EDTA) and tetracycline hydrochloride as root biomodification agents: An in vitro SEM study

Guide: Co-guide:

ABSTRACT
Background and aims. Root conditioning is recommended as an adjunct to mechanical root surface debridement to re-move smear layer and root associated endotoxins. The aim of this study was to compare the efficacy of citric acid, ethyl-enediaminetetraacetic acid (EDTA), and tetracycline hydrochloride as root biomodification agents. Materials and methods. Fifteen freshly extracted teeth were root planed and specimens obtained from the cervical two-thirds of the root. Each tooth root provided four specimens to be treated by saline (used as control, citric acid, EDTA and tetracycline hydrochloride for a total of three minutes using the passive burnishing technique. The specimens were then observed under a scanning electron microscope (SEM). The specimens were evaluated for presence or absence of smear layer, total number of tubules visible, number of patent tubules and diameter of patent tubules. Statistical analysis was performed using paired -test. Results. All three test groups effectively removed the smear layer in

Osseointegration

Guide: Dr. H.S. Grover

ABSTRACT
Dental implantology has come a long way from its introduction into dental practice. The concept of osseointegration is much better understood now. Various implant surface modifications, concepts of immediate implant placement and immediate loading have all added a new dimension to osseointegration. Numerous studied have indicated that a typical initial interface will have some regions with direct bone implant contacts and other regions with bone implant gaps.

Keywords: osseointegration, delayed placement.
comparison to the control. The number of patent tubules present in the citric acid and EDTA test groups was significantly higher than those in the tetracycline hydrochloride test group. However, the average diameter of the patent tubules was greater in the tetracycline hydrochloride group compared with citric acid and EDTA groups. Conclusion. All three agents are equally effective root biomodification agents. In clinical practice, EDTA might be more useful owing to its neutral pH.

Key words: Citric acid, EDTA, root conditioning, SEM, tetracycline hydrochloride

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<th>Dr. Deepti Sharma (2008-10)</th>
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<td>To evaluate and compare gingival crevicular fluid vascular endothelial growth factor (VEGF) levels amongst systemically healthy subjects and patients suffering from Type II Diabetes Mellitus, in periodontal health and disease</td>
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<td>Introduction: GCF is serum transudate or inflammatory exudate that derives from the periodontal tissues and can be collected at the orifice or from within the gingival crevice. Material and Method: Study sample had 30 subjects, grp A had 15 systemically healthy patients Grp B had 15 patients suffering from Type II diabetes mellitus. Results: Human VEGF is present in GCF in periodontal health and disease. With increased periodontal destruction, there is substantial increase in GCF VEGF concentration. Keywords: GCF, VEGF, Diabetes</td>
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<td>Periodontal plastic procedures</td>
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<td>Guide: Dr. H.S. Grover</td>
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<td>Periodontal plastic surgery are surgical procedures performed to prevent or correct anatomic, developmental, traumatic or disease induced defects of the gingival, alveolar mucosa or bone. Periodontal plastic procedures have the potential to create soft tissue environment that permits esthetic reconstruction of even the most challenging cases. The difference between an acceptable and an outstanding surgical treatment depends on effective treatment planning and multidisciplinary coordination. Keywords: esthetic reconstruction, multidisciplinary dentistry.</td>
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