24. The efficacy of a novel nanostructured biomaterial in inhibiting implant abutment interface microbial flux: a pilot invitro prospective study

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Periodontal disease is the most common cause of tooth loss, and significant corrections have been observed between the presence of periodontal disease and the onset of peri-implantitis. Still, no effective treatments of peri-implantitis have been developed, as highlighted by esposito et al (intervention for replacing missing teeth: treatment of peri-implantitis. Cochrane database sys rev 2012), who pointed out that there are currently no gold standard procedures that allow tissues to recover to acceptable levels after peri-implantitis has developed. Strategies to prevent the onset of peri-implant disease include the reduction of patient-related and implant-related risk factors (ali a et al. Peri-implantitis: associated microbiota and treatment. Med oral patol oral cir bucal 2011). Concerning implant-related risk factors, the implant-abutment interface (iai) seems to be one of the most important factors in the onset and progression of peri-implantitis. As the bacterial bidirectional flux usually occurs in the iai, some author suggests that decreasing the gap at the iai might prevent the onset of peri-implantitis. Some studies show some materials might favor healing and reduce bacterial load in the peri-implant region. Antibacterial coatings are also being actively studied. This study aimed to evaluate the efficacy of a novel nano-structured biomaterial in reducing iai bacterial flux.. Presented by – Dr
25. Evaluation of electromyographic activity of temporalis, masseter, digastric and sternocleidomastoid muscles in surgically managed temporomandibular joint trauma cases

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The present study was intended to evaluate the muscle activity of masseter, temporalis, anterior belly of digastric and sternocleidomastoid muscles using surface electromyography in surgically managed temporomandibular joint trauma cases and to compare the same with the control group.

Materials and methodology: Surface electromyography was used to evaluate muscle activity and jaw tracking device was used to evaluate mandibular movements. The surface electrodes were placed on the most prominent part of the muscles. The emg activity was studied bilaterally with the mandible at the rest position and during maximal voluntary clenching (mvc). By means of jaw tracking device, maximum mouth opening, protrusion, lateral excursions of the affected and unaffected side were recorded. The records were loaded onto the computer for data analysis.

Results: There was no significant difference in the mean values during resting and biting between the affected and unaffected side with respect to temporalis, masseter, sternocleidomastoid and digastric muscles. There was no significant difference in the mean values during resting between test and control subjects with respect to the temporalis muscle on the affected side, masseter muscle on the affected and unaffected side, sternocleidomastoid muscle on the affected and unaffected side, digastric muscle on the affected side and unaffected side (p=0.364, 0.326, 0.449, 0.096, 0.325, 0.326 and 0.52) respectively. However with respect to temporalis muscle on the unaffected side, control subjects had significantly higher mean than test group (p=0.023).

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26. Comparison of antimicrobial properties of silver nanoparticles and chlorhexidine in denture base resin - an in vitro study

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Candida-induced denture stomatitis is a common form of oral candidiasis that manifests as diffuse inflammation of the denture-bearing areas. Oral candidiasis appears to be caused by a multiplicity of predisposing factors. Chlorhexidine and silver nanoparticles are widely prescribed in dentistry due to its broad-spectrum antimicrobial activity, including c. Albicans. The antifungal effect of chlorhexidine has been shown in many studies, and it has been demonstrated that exposure of c. Albicans to chlorhexidine suppresses the ability of candida to adhere to buccal epithelial cells. The use of silver nanoparticles is also important, as several pathogenic bacteria have developed resistance against various antibiotics. A sustained release delivery system for treatment of denture stomatitis using chlorhexidine incorporated into a tissue conditioner has been investigated, and it has been confirmed that there was a gradual release of the drug from the tissue conditioner and inhibition of candida growth in vitro. The purpose of this study is to compare the antifungal activity against c. Albicans when silver nanoparticles and chlorhexidine powder is incorporated in denture base resin.

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27. Evaluation of stress relaxation property of different soft liners after thermocycling and cyclic loading in various time intervals: an in vitro study

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Objectives: Soft liners are being applied beneath the complete dentures in the patients who complain of