

16th International Conference on Modern Dental Health & Treatment, September 21-22, 2018, Philadelphia, USA-MRI-based determination of occlusal splint thickness for temporomandibular joint disk derangement: a randomized controlled clinical trial

Ayman Hegab

Al-Azhar University, Egypt

Objective: This prospective study examined a method using magnetic resonance imaging (MRI) to assess the appropriate effective occlusal splint vertical thickness in the management of disk derangement. Study Design: Patients were diagnosed as having internal disk displacement of the temporomandibular joint and were divided into 2 groups. Group I (disk displacement with reduction) was subdivided randomly into 2 subgroups: subgroup IA (control group) comprising patients treated with 3-mm-thick splints; and subgroup IB (study group) comprising patients treated with MRI-based splint thickness. Group II (disk displacement without reduction) was subdivided randomly into 2 subgroups: subgroup IIA (control group) comprising patients treated with 3-mm-thick splints; and subgroup IIB (study group) comprising patients treated with MRI-based splint thickness. The primary outcome variables were maximum voluntary mouth opening and visual analogue scale scores for pain. The secondary outcome variable was joint sound. The final sample was composed of 162 patients (Group I = 90 and Group II = 72). Results: Statistical analysis showed significant improvement of the clinical outcomes in subgroups IB and IIB compared with that in subgroups IA and IIA. Conclusions: On the basis of MRI measurements and clinical outcome, the present study we recommend 4-mm and 6-mm vertical splint thickness for disk displacement with reduction and disk displacement without reduction, respectively, for 1 year. Magnetic resonance imaging” MRI measurements and clinical outcome, the present study we recommend 4-mm

and 6-mm vertical splint thickness for disk displacement with reduction and disk displacement without reduction, respectively, for 1 year. Bichectomy, buccal fat expulsion or buccal lipectomy rose in 1980s as a corresponding technique to cases in which the rhytidectomy did not acquire palatable outcomes to orchestrate the center and lower third of the face. These days, this method has come back to noticeable quality and has been broadly utilized for diminishing the face, following exceptionally exact signs. It is a straightforward and extremely safe surgical method, demonstrated for patients with an adjusted and wide face, which can be executed as outpatient surgery under neighborhood anesthesia made out of 2% Mepivacaine and 1:100000 Epinephrine. The outcome is a congruous center and lower third of face.

Forces may exceed the mechanical or biological load-bearing capacity of the osseointegrated oral implants or the prosthesis, causing either a mechanical failure or failure in the osseointegration. Load transfer from implants to surrounding bone depends on so many factors; one of it is the prosthesis type. Selection of the type of material used on occlusal surfaces of implant-supported restorations is important because there can be destructive forces at the junction surfaces of the alveolar bone and implant. As several materials have been introduced in this field; the aim of this study is to examine the effect of newly introduced suprastructure materials on the stress distribution in implanted system and supporting bone compare to previously investigated material and is evaluate the influence of different supra structure

materials in stress distributions around supporting bone and implant system and establish a relation between module of elasticity in the stress distributed on the implant system and bone. Finiteelement stress analysis method using ANSYS program were used for evaluation. XiVE of 13 mm length and 3.8 mm diameter simulated. Implant placed in the mandibular first premolar area was simulated and analysed. Crown designs were as follows: Porcelain fused to noble metal crown, porcelain fused to base metal crown, In-Ceram porcelain crown, and IPS Empress 2 porcelain crown and lava ultimate. A 200-N oblique force was applied to the buccal cusp. The results of this study indicated that different types of restorative materials play an important role in the amount and distribution of the stresses in the suprastructure and implant and may play a role in protecting the bone. The stress on veneer were similar in similar veneered material (PFBM, PFNM, Inceram) highest was PFNM (437.904) and the significant was in the least stressed material lava ultimate which it was (378.507). In framework the highest was inceram (60.166). In bone PFNM was the highest (121.282) and lava ultimate the lowest (121.086). In implant inceram is the highest (215.989) and again the lava ultimate was the lowest 215 (801). Although the modulus of elasticity of suprastructure material has a correlation with stress in implant and bone, it doesn't solely and significantly the influence of the stress value and distribution in implant and bone. A combined with

mechanically homogenous character is an important factor in providing a preferable effect on stress and its influence. This character has represented in lava ultimate. Extraction of third molars is the most widely recognized surgical technique performed in oral surgery once a day and, in spite of surgical abilities and aptitude, entanglements may happen. Difficulties saw amid or after third molar evacuation may incorporate torment, swelling, dying, contamination, sinus aperture and nerve harm. Luckily, with an appropriate administration and a decent surgical strategy, the rate of such occasions is low. Subcutaneous emphysema related with dental extraction happens when the air from the rapid dental handpiece is constrained into the delicate tissue through the reflected fold and attacks the neighboring tissues, prompting swelling, crepitus on palpation and every so often spreading through the tissue spaces of the fascial planes. Albeit uncommon, iatrogenic subcutaneous emphysema can have genuine and conceivably hazardous results. Care ought to be taken when utilizing air-driven handpieces. The entrance of air into the facial tissues is not restricted to tooth extractions, but rather may likewise happen through different entries of passage, for example, endodontically treated teeth, periodontium and cuts of intraoral delicate tissues. At the point when subcutaneous emphysema happens, it must be immediately analyzed and legitimately figured out how to decrease the danger of further entanglements.