P17  EFFECT OF DISINFECTANT AND IMPRESSION TRAYS ON THE DIMENSIONAL STABILITY OF ALGINATE IMPRESSION
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Aims: To investigate the dimensional stability of irreversible hydrocolloid impression material when using different type of impression trays and after immersion in disinfectant for various durations.

Method: Partially edentulous acrylic models of four different Kennedy classifications were used to take alginate impressions (GC ARMAFINE DF III). For each group, 3 separate impressions were taken in stock trays and special trays, and then immersed in disinfectant (Perform*) for 10 minutes, 30 minutes and 1 hour. Control impressions were not disinfected. Next, the impressions were made into study casts and linear measurements were determined with a digital caliper. Dimensional stability was calculated from the deviation in median values of linear measurements of predetermined reference points on study casts compared to master acrylic models. Friedman test and Mann Whitney test were used to assess the effect of immersion duration and type of tray used on the dimensional stability of the alginate impressions.

Results: The dimensional stability of alginate impressions immersed for different durations showed no significant difference when compared to master models or control casts for both stock trays and special trays. Casts produced from special tray impressions were slightly larger by about 0.2, 0.5, and 0.03 mm than master model and cast produced from stock tray impressions. This difference was not significant and could be due to even shrinkage of impression material during setting.

Conclusions: Different immersion duration and type of trays used during impression making had no significant effect on the dimensional stability of alginate impression material for partially edentulous arch models.

P18  BEAT THE HEAT
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Background: Dental pulp is a highly vascularized tissue whose vitality may be impaired during tooth preparation and clinical restorative procedures. Due respect to the dental pulp needs to be paid when restoring a vital tooth, as it can affect the long term prognosis of the tooth. In a tooth undergoing restorative treatment, the adaptability of the dental pulp to a new irritant can be compromised because of the previous insults to the tooth by dental caries, old restorations, occlusal trauma, wasting diseases, or periodontal diseases. Therefore any additional trauma during restorative procedures to the stressed pulp should be minimized to maintain the pulp cell function and viability.

Content: The various irritants that can compromise the health of the dental pulp during restorative treatment are microbial, thermal, mechanical, electrical, and chemical irritants. The most common cause for iatrogenic pulp damage among these irritants is the rise in pulp temperature during restorative therapy. Pulp hyperthermia during restorative therapy may be caused by rotating instrument tooth preparation, laser treatment, light curing of dental composites, polishing of restorative materials, light-enhanced bleaching, direct fabrication of provisional restorations or ultrasonic instrumentation. The purpose of this presentation is to describe the various reasons for rise in pulp temperature during restorative procedures and the precautions that need to be taken to avoid the risk of pulp hyperthermia.

P19  BISPHOSPHONATE RELATED OSTEONECROSIS OF THE JAW – OUR EXPERIENCE
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Background: Incidence of reported Bisphosphonate Related Osteonecrosis of The Jaw (BRONJ) has been increasing especially following tooth extraction. Treatments often complicated by the medical illnesses, the medication and the general condition of the patient.

Case Reports: Case 1, a denture wearer presented with multiple traumatic oral ulcers exposing necrotic bone (Stage 3) with marked trismus. Patient was on tab. Alendronate 70mg weekly for more than 3 years. Case 2 received tab. Alendronate 70 mg weekly for more than 6 years presented with 1 year non healing extraction socket with oro-antral fistula and intermittent pus discharge (Stage 3). The third case received IV Zometa for 6 months prior to developing persistent pain of upper and lower jaws leading to non healing extraction sockets of 2 months duration (Stage 2). Diagnostic Tests: Orthopantomogram, CT scan (case 2), bone scan (case 3) and biopsy.

Treatment: The bisphosphonates were discontinued for all 3 cases and all received antibiotic combined with antimicrobial rinses and analgesics. Antifungal was prescribed for case 1 followed by occlusal splint. Second case had white head varnish pack for 2 months, followed by sequestrectomy and closure of oro-antral fistula. Curettage of the sockets was done in the last patient. All three cases were successfully treated with healed sockets and ulcers and improved mouth opening for case 1.

Comments: BRONJ can actually lower the quality of life of the sufferers. Prevention and early detection and effective management should be undertaken to help improve their condition.