INTRODUCTION

The term iatrogenic describes an abnormal mental or physical condition induced in a patient by the effect of treatment. Iatrogeny produced by either an inadvertent or erroneous treatment, or may be a result of either acts of commission or act of omission by the therapist. Dental iatrogenic treatment can produce injury either on the tooth or the Periodontium or both. Several examples of dental iatrogenic case report have been published in the literature. Many of them resulted in the periodontal defects too. Retained black sutures retained rubber dam, Contact stomatitis to self-polymerizing resins when used directly in the oral cavity has been reported.

Here is an Interesting case report of problem of food impaction treated with the cold cure acrylic.

Case report

A 34 year old male patient visited the department of Periodontics with the complaint of mild pain and discomfort in the lower right molar region since 6 months. Medical history was of good general health and patient was not taking any medications. Past dental history revealed that he had severe problem of food getting stuck between the posterior teeth and he had visited a dentist for the same problem. According to him the dentist did the restoration in between the teeth and after that he was relieved of his problem. During the procedure patient had severe pain and which slowly subsided over 5 to 6 days. At present patient is having only mild pain. Patient was having a habit of pan chewing, with tobacco since 10 years.

No abnormal changes were observed extra orally. On Intraoral examination, since the patient was a tobacco chewer a thorough examination of the buccal mucosa, vestibule, floor of the mouth, and palate mucosa was done. There was no pathological alteration seen in any part of the mucosa. On examination of the gingiva, between 46 and 47, there was presence of acrylic appliance heavily stained with pan was seen (fig 1).
On close examination of the device, it was noted that cold cure acrylic was molded in to the interproximal area of the 46 and 47. Approximal gingiva was red in color and was bleeding on slight provocation. (Fig 1) OPG of the patient revealed very minimal bone loss between 37 and 38 & 47 and 48. It was appeared to be having bone loss between 46 and 47; however it was the shadow effect of the acrylic mold which was packed between the teeth. (Fig 2)

Patient was explained about the procedure which was done to him and iatrogenic effect of the same was explained. He was motivated to quit the tobacco through tobacco cessation program. A thorough oral prophylaxis was done. Acrylic mould was removed separating it in the proximal aspect, in to buccal and lingual parts. (Fig 3) After removal of the acrylic mold, gingiva appeared red in color, soft and soggy in consistency, bled on slightest provocation. (Fig 4) There was no deepening of the gingival sulcus. Patient was advised to use the proxa brush and recalled after 15 days for follow up and for further treatment.

**Discussion**

Acrylic resin denture contains methyl methacrylate (MMA) as a residual monomer. MMA has the potential to elicit irritation, inflammation and allergic response to oral mucosa. Further residual monomer is capable of producing stomatitis and angular chelitis. MMA and formaldehyde which is formed as oxidation products of residual monomer are allergic agents responsible for the mucosal injuries. Direct application of cold cure acrylic on the mucosa immediately causes the chemical burn. In the present case report patient had severe pain immediately after the procedure due to chemical burn. Self-polymerizing acrylic was applied directly on the tissue, is known to which may result in the severe gingival changes, which was observed in the present case.

**CONCLUSION**

Knowingly or unknowingly injury to the Periodontium can be caused by the dentist during various operative procedures. Most of the injuries are reversible. In few cases where patient do not report to the dentist for a long time because of fear of dentistry or unaware about the procedure, which has been done, which leads to irreversible damage including bone loss. Cold cure acrylic when used directly on the tissue like in this case lead to chemical burn.

**REFERENCES**