CASE SERIES

Esthetic provisional replacement of a hopeless anterior tooth by natural pontic: A case series
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Abstract
Sudden tooth loss in the anterior region can be due to trauma, periodontal disease, or endodontic failure. The loss of anterior teeth can be psychologically and socially damaging to the patient. The case reports here present a novel technique for replacing an anterior tooth, in which the patient’s natural tooth was used as a pontic. The natural tooth pontic was stabilized in the extraction socket with a resin wire splint as a provisional restoration to maintain the gingival architecture while the permanent bridge was being constructed.

Keywords
Esthetics, fiber reinforced composite, hopeless prognosis, natural tooth pontic, provisional restoration

Introduction
The loss and replacement of anterior maxillary teeth pose several challenges. Certain situations such as dental trauma, advanced periodontal disease, extensive root resorption, and endodontic failure require the dentist to remove an anterior tooth. Whenever an anterior tooth is lost, the clinician should provide an immediate replacement to avoid esthetic, masticatory, and phonetic difficulties and to prevent the drift of adjacent teeth. This approach would also permit the patient’s natural crown to be used as a pontic for an immediate bridge, with little or no need for complicated laboratory procedures. The use of the extracted natural crown as a pontic provides the advantage of having the right size, shape, texture, and color. The use of a modified resin-bonded bridge with a natural tooth pontic provides additional advantages of esthetic maintenance and preservation of the lost tooth’s gingival architecture.

Case Reports
Case 1
A 36 years female patient reported to the Department of Periodontics and Oral Implantology with a chief complaint of mobility of tooth in anterior region of the upper jaw. The patient gives a history of root canal treatment 1 year back. Intraoral clinical examination showed Grade III mobility and discoloration of tooth was observed with respect to right lateral incisor [Figure 1]. Radiograph revealed a horizontal fracture at middle 3rd of root with complete periodontal ligament space widening. Due to its hopeless prognosis, it was decided to extract the tooth. As the patient was concerned about esthetics and wanted immediate replacement of tooth, we planned for natural pontic with fiber reinforced composite.

Procedure – The tooth was extracted under local anesthesia [Figure 2] and the fractured fragment was removed, then the required crown form was obtained and splinted to adjacent teeth with the help of fiber reinforced composite (Interlig) [Figure 3]. The patient was followed up for 3 months, and then a fixed canine supported cantilever bridge was delivered.

Case 2
A 29 years female patient reported to the Department of Periodontics and Oral Implantology with a chief complaint of mobility of tooth in anterior region of lower jaw. Intraoral clinical examination showed Grade III mobility with respect to right lateral incisor [Figure 4]. Radiograph revealed bone loss extending entire root length and periapical area. Due to its...
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hopeless prognosis, it was decided to extract the tooth. As the patient was concerned about esthetics and wanted immediate replacement of tooth, we planned for natural pontic with fiber reinforced composite.

Procedure – The tooth was extracted under local anesthesia [Figure 5], root resection was done, the pulp tissue was removed and light cure composite resin was cured within the canal, the obtained crown was splinted to adjacent teeth with the help of fiber reinforced composite (Interlig) [Figure 6]. The patient is under follow-up for 6 months.

Discussion

The present era of dentistry relies extensively on esthetic principles because of increasing patient demands. Immediate replacement of lost anterior teeth prevents psychological and social trauma to the patient. A resin composite may be used to splint the pontic to sound neighboring teeth as a provisional restoration until the final prosthesis is fabricated. One major
advantage of retaining the patient’s natural crown is that the patient can better tolerate the effect of tooth loss.\textsuperscript{[5]} In the present case reports, the patients wanted immediate esthetic replacement. The natural tooth pontic was splinted immediately after extraction to the adjacent teeth, to preserve the gingival architecture of the extraction socket, and to fulfill the esthetic requirements of the patient until the final prosthesis was fabricated. Replacement of missing anterior tooth using a natural tooth pontic technique is an intermediary restoration and may not be used as permanent restoration for long term. This technique also has some advantages such as good esthetic results, preservation of natural crown structure, no laboratory work required, reduced psychological impact on the patient, this technique is reversible and allows other restorative options to be evaluated, micro-resiliency of pontic allows stimulation of underlying tissue and avoids excessive post extraction ridge resorption.\textsuperscript{[1,4,5]} The overall objective of splinting is to create an environment where the tooth movement can be contained within physiological limits, thereby improving patient comfort and the restoration of function.\textsuperscript{[6]}

Conclusion

Natural tooth pontic allows for exact relocation of the coronal part of the extracted tooth in its original intraoral three dimensional positions, and thus relieves the anxiety of the patient caused by the sudden loss of an anterior tooth. Moreover, in situations where anterior teeth need to be removed, the use of the natural tooth pontic while the gingival tissue heals is an excellent, esthetically acceptable treatment option, and reflects the dentist’s concern for the patient’s esthetic, functional as well as psychological needs. Immediate tooth replacement can be done as there is no lab work involved. Natural teeth serve as an excellent yet transient treatment option for immediate replacement following extraction in the anterior esthetic zone. The patient satisfaction of continuing to have their natural teeth in the post-extraction period, taking care of his esthetic needs and simultaneously providing him with time to choose from the various final treatment options available is immense. Patient’s positive psychological response, cost effectiveness, and achievement of excellent soft tissue contours make this technique very useful.

References
