

CROWN LENGTHENING IN DENTINOGENESIS IMPERFECTA-A CASE REPORT

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Introduction - Crown lengthening in dentinogenesis imperfecta demands extra caution as the tooth structure in this condition is weak and friable. As the teeth are shorter, maintaining the crown root ratio with careful crown lengthening along with providing an optimum crown structure become necessary. Due to severe attrition of teeth enamel fractures frequently. Thus the treatment requires improvement of esthetics and protection of teeth from further wear so as to enhance their functional efficiency.

Objective - Strategy for preserving such teeth involves multiple crown lengthening followed by rehabilitation of the same. Maintaining biological width, achieving favorable crown root ratio and creating ferrule effect concomitantly are fundamental in successful prosthetic rehabilitation.



Preoperative view



Crown lengthening procedure

Material and Method - A case with severely attrited maxillary and mandibular anterior teeth was diagnosed with dentinogenesis imperfecta. After completion of endodontic therapy, sufficient supporting crown structure was created to support the post and core fabrication with surgical crown lengthening. Local anesthesia was achieved and a full thickness flap was reflected after giving internal bevel incision, crevicular incision and interdental incisions. Osteotomy was performed to maintain appropriate biological width and tooth structure for prosthesis keeping in mind the positive bony architecture. Flap was sutured apical to the anticipated crown margin. Sutures were removed two weeks postoperatively. Uneventful healing was observed during the post-operative follow-up visits. Prosthetic rehabilitation was done following complete healing.

Result - Successful prosthetic and esthetic rehabilitation of patient was achieved after performing crown lengthening of multiple teeth while maintaining the supporting attachment apparatus of periodontium.

Conclusion -The interdisciplinary approach involving endodontic therapy, multiple teeth crown lengthening and prosthetic rehabilitation is desirable for beneficial outcome in dentinogenesis imperfecta.

- Bibliography** -1.Carranza's: Clinical Periodontology:Newman,MG,Takai,Carranza:2011,pp.598.e17
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Post rehabilitation