

AN AUGMENTED ENDODONTIC ENDOSEOUS IMPLANT. AN EVALUATION OF GOLD AND TITANIUM AS STABILIZING MATERIAL WITH HYDROXYAPATITE FOR GRAFTING BONY DEFECT IN MOBILE TEETH

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INTRODUCTION :

Investigators Believed that the principal cause of failure in the endodontic stabilizer is periodontal communication with apex of the root, others Believed that the stabilizer post material is the cause of implant failure.

This study evaluate Gold and Titanium as stabilizing material. The implant material should be compatible and non electrolytic metal i.e. should not be ionized. Gold and Titanium showed good results with the Technique which have been used. There was no significant difference in results between Gold and Titanium. Titanium has excellent via compatibility but has serious weak points such as high melting temperature 1670 °C and chemical reactivity at high temperature and special technique of its casting (Watanabe et al)⁽¹⁾, but titanium oxide is chemically stable, hard but brittle. Also there was a question about osseointegration of the titanium implant tied to natural tooth, (Gary and Winter)⁽²⁾.

Augmentation of bony defect by the Hydroxyapatite gave advantage for this new technique with very good apical seal and good alveolar heal.

REVIEW OF LITERATURE :

Preservation of the natural dentition and restoration of the oral cavity to a normal functional state is a primary goal in dentistry. In addition to

advances in cariology and periodontics, the use of intrabone implants has provided a method for maintaining a functional oral environment.

Since Endodontic stabilizer was introduced in 1943 by Strock⁽³⁾ who reinforced the loose teeth and followed by Orlay⁽⁴⁾ 1964 who used the root canal space in an existing tooth as a pathway for implant to extend into the apical bone. He presented more than 500 endodontic stabilizer utilizing smooth tapered virilium post with successful results. Later Linkow⁽⁵⁾ 1966, Frank⁽⁶⁾ 1967, Morse⁽⁷⁾ 1969, Herbert⁽⁸⁾ 1972, Skedmore⁽⁹⁾ 1972, Feldman et al⁽¹⁰⁾ 1972, Weiss et al⁽¹¹⁾ 1973 stated that metalurgical problems is important factor, keeping the surface free of metal Transfer, tarnish and corrosion Gudy and Weiss⁽¹²⁾ 1974 recommended using titanium as stabilizing material. Fragiskos et al⁽¹³⁾ presented a new endodontic stabilizer implant device that can be used immediately after enucleation of large periapical cyst.

Due to high failure results for various reasons including incorrect case selection, improper use of the materials and poor preparation for the implant, stabilizer was felt into disuse. But Weine Frank⁽¹⁴⁾ 1993 suggested that the endodontic endosseous implant should not be discarded totally, but with further research to improve the material and technique, it still may be used in carefully selected cases.

Various designs and materials have been ad-

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