Complex oral rehabilitation of a patient with Ectodermal Dysplasia by means of dental implants

Miroslav Dragovic¹, Marko Pejovic¹, Aleksandra Spadijer Gostovic¹, Svetlana Dragovic¹, Djordje Miketic², Snjezana Colic¹ / Marko Pejovic

¹School of Dental Medicine, University of Belgrade, Belgrade, Serbia

²Private dental office 'Smile esthetics', Belgrade, Serbia

Background and Aim

Ectodermal dysplasia (ED) is a rare hereditary disorder that affects ectodermally derived tissues and organs. Although it is non–progressive condition its repercussion on patient's oral function and esthetics may be serious due to failing or missing teeth. In addition, these patients are prone to have low self–esteem and challenging social life as a result of dysmorphic features of oral and maxillofacial region. Frequently, multiple surgical procedures are required to deal with this ailment.

The aim of this case report is to present implant placement with simultaneous composite bone augmentation in a patient with ED in order to enhance regeneration, shorten the treatment time and reduce number of surgeries.

Methods and Materials

A 26 years old patient with ED had congenital oligodontia with 25 permanent teeth missing. Firstly, deciduous and failing teeth were extracted and after period of healing implant surgery was performed combined with simultaneous ridge augmentation. In the upper jaw both central incisors were preserved and 6 bone level implants were placed accompanied with contour ridge augmentation using demineralized bovine bone matrix (DBBM) and fibrin glue covered with absorbable collagen membrane.

In the mandible five teeth were estimated to have good long term prognosis and 3 bone level implants were inserted with simultaneous augmentation (autologous bone + DBBM, collagen membrane). Six months later implants were uncovered and restored with fixed prostheses.

Results

Six years follow – up showed 100% implant survival rate. All implants were stable with no signs of peri-implantitis. According to patient, therapy improved his quality of life and social interactions to a great extent.

Conclusions

According to the literature, implant therapy may be effective method for treating patients with ED including implant survival rate of 97.9% during 24-months follow–up. Main prerequisite for successful accomplishment of this procedure are patient's motivation not only to undergo extensive surgical procedures but also to be persistent in long term maintenance of high level of oral hygiene. Additionally, balanced approach and teamwork are beneficial for carrying out demanding treatment protocols.

References

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