

SUMMARY

The replacement of lost teeth with endosseous implants is an effective and acceptable treatment modality. Oral implants play an important role for replacing missing teeth to restore the function and aesthetics. The immediate placement of implants into fresh extraction sites has become a routine procedure. They have proven to be a successfully predictable treatment modality, and their osseointegration occurs with a high success rate.

The aim of this study was to assess the effect of one stage surgery in comparison with two stage surgery on osseointegration of immediate dental implants. Sixteen patients indicated for extraction of posterior teeth and insertion of dental implants were included in this study. They were divided into two equal groups.

In group I, one -staged surgery, swiss plus dental implants were inserted into the fresh extraction sockets, while group II two surgery received eight implants of the tapered screw vent submerged and grafted with fisiograft to fill the bony defects all around the fixtures if needed especially in molar teeth.

The patients of both groups were evaluated clinically and radio graphically at 1, 3, 6 and 6 months after loading. The clinical parameters included the sulcus depth around the implant, mobility of implant and gingival index. The Bone density measurements around the implants were carried out via digora software which were used to assess the bone density changes around the implants at the different follow up periods and osteointegration.

Summary and Conclusion

The results showed clinical success of all cases. The bone density measurements were higher in group II than that of group I at 1,3 ,6 and 6 months after loading. Also, the change in bone density measurements from first six months in group II were higher than that of group I and through second six months but at end of the study there is no significant difference of the bone density values for both groups.

CONCLUSION

In conclusion, the present study clarified that the use of submerged dental implant that were placed in fresh extraction sockets may enhance the bone formation around them. Moreover , the implants placed immediately after teeth extraction showed a successful osseointegration without the need of using bone grafting materials especially in premolar region for both groups but in molar area the implant that placed in interseptal bone must be placed bone graft to fill the space between the implant and wall of the socket for both groups It is recommended submerged dental implant is better in molar teeth than non submerged with fisiograft materials, while the both groups the bone density at end the follow of the present study found bone density formed equally for both groups.

It is recommended submerged dental implant is better in the posterior teeth in contrast with non submerged dental implant especially in molar area with or without bone graft materials.