

Considerations for Successful Implant Treatment in Diabetic Patients

Mohamed A Hassan
October 6 University, Egypt

Literature review study aims to evaluate the effectiveness of glycaemic control, preoperative antibiotic and CHX mouth rinse and patient motivation on implant success in diabetic patients.

Discussion and Results: Hyperglycaemia have been shown to alter normal process of osseointegration by inhibition of osteoblastic cell proliferation and collagen production, Prolonged hyperglycaemia may result in delayed wound healing around dental implant and osseointegration due to altered metabolic rate

While, the time required to achieve 100% level of healing, patients with high level of HbA1c $\geq 8.1\%$ required about twice the time to return to baseline levels compared controlled and non-diabetic patients. Some articles shows better success rates of dental implant treatment regardless diabetic control level. By following a restricted protocol includes antibiotic course and CHX (0.12) mouthwash. Preoperative antibiotic usage showed a favourable improvement in implant survival (Table1)

Also the improved implant success by using CHX persists from implant insertion till prosthesis construction phase and extend post-loading. (Table 2)

	Non-Diabetic	Diabetic
	Failure	Failure
Pre-Op-ABX	4.9%	2.9%
No Pre-Op-ABX	9.4%	13.4%

Table1

	Non-Diabetic	Diabetic
	improvement	Improvement
placement	97.4%	96.9%
Before-prosthesis	98.4%	100%
Post-loading	98.5	98.7

Table2

Conclusions: Pre-operative antibiotic regimens and CHX mouth rinse must be kept in consideration to enhance wound healing and reduce possibility of infection. Always consider delayed loading, Patient motivation and restriction to good glycaemic control must be noticed and recorded in patient's file through follow up visits Careless patients that show insufficient oral health care and lack of motivation. In such cases dental implants doesn't consider a treatment of choice

Biography:

Mohamed is a demonstrator in oral medicine, Periodontology and oral diagnosis, faculty of dentistry, October 6 University. He has completed his Msc of Implantology from international medical college-Germany. He is a member of the German board of oral Implantology. Also He is the director of Hayah implant Education Center, his current research interest include implant in patients with low bone quality and implant in diabetic patients.