

## Current opinion and trends in Implant Dentistry; A keynote on present scenario

Vishal Singh

Department of Prosthodontics, Vananchal Dental College and Hospital, Garhwa, Jharkhand, India.

Dental Implants have been used in a variety of different forms for many years. Since the mid-twentieth century, there has been an increase in interest in the implant process for the replacement of missing teeth. Branemark applied scientifically based research techniques to develop an endosseous implant that forms an immobile connection with bone.<sup>[1]</sup> The term osseointegration is defined as “an apparent direct connection of an implant surface to host bone without intervening connective tissue.” Simply using an implant that is manufactured by a specific company does not ensure that the implant becomes “osseointegrated”. The bone to implant connection is dependent upon diagnosis, treatment planning, sterilization techniques, atraumatic surgery, proper implant surface preparation, undisturbed healing, and controlled force application. The previously documented success rates are dependent upon strict adherence to proper technique. Patient selection is critical to achieve success. Appropriate implant use ensures the achievement of predictable success for the procedure.<sup>[2-3]</sup> When considering implant applications, the use of all appropriate diagnostic data is imperative. Physical and emotional health must be optimal to enhance the placement of a foreign body into bone. Medical consultations are used to determine any systemic problems that may interfere with healing or with the patient’s ability to accept the proposed treatment and maintain adequate oral hygiene. Because implant placement is critical, every effort is made to ensure that the location and angulation of implants will provide for the favorable distribution of functional forces. Articulated diagnostic casts are invaluable in such a determination. Diagnostic casts mounted with an accurate record of centric jaw relationships and maxillo-mandibular

occlusion on a semiadjustable articulator provide a multitude of information related to treatment, all of which influences the final prosthodontic treatment plan. Surgical guides to implant placement will assist the surgeon to create biomechanically sound implant locations. It dictates to the surgeon the implant body placement that offers the best combination of support for the repetitive forces of occlusion, esthetics and hygiene requirements. Patients must be informed that even with thorough planning, the implant process does carry the risk of failure. Fortunately, failures encountered are most often those of individual fixtures and require only a modification of prosthetic design rather than the more catastrophic events associated with less favorable designs of the past.<sup>[4]</sup> Patient expectations should be realistic. There is no panacea in the treatment of dental disease. Implant prostheses can be used to restore function and facial appearance, but they cannot be expected to turn back the hands of time. Proper patient counselling prior to surgery will avoid the possibility of untoward interpersonal conflicts at the time of insertion of the prosthesis.

### References

1. Misch CE. “Contemporary Implant Dentistry”, Second Edition, Mosby Publications, 2002.
2. Petrikowski CG. Presurgical radiographic assessment for implants. *J Prosthet Dent* 1989;61:59-64.
3. Babbush CA. “Dental Implants: The Art and Science”, 1<sup>st</sup> Edition, W. B. Saunders Company, 2001.
4. Eckert SE, Laney WR. Patient evaluation and prosthodontic treatment planning for osseointegrated implants. *Dent Clin North Am* 1989;33:599-617.

**Source of Support:** Nil

**Conflict of Interest:** None declared