Abstract

The advent of osseointegrated dental implants focused initially on functional rehabilitation. Interest today centres on aesthetics and the philosophical ideal of replicating nature. Implants can be placed beyond resorbed anatomic limitations where the final prosthesis should be, rather than within the pre-existing resorbed bone. In order to achieve this, the following must be considered: implant positioning, adequate bone support and the overlying soft tissue envelope. Common techniques to modify the surgical environment include different methods of bone grafting and regeneration, ridge expansion and sinus augmentation. With the advent of growth factors like bone-morphogenetic proteins, restoration of bony contours will become more predictable. Soft tissue management techniques include tissue expansion and contouring, gingiva grafts and advancement or rotational flaps. Though some of these procedures can be done concurrently with implant placement, a secondary surgical procedure is often required. Ideal implant positioning involve establishing correct orientation in all dimensions. Due consideration should also be given to occlusion and harmony of the final restoration with the adjacent dentition.

Key words: Bone grafts, Bone regeneration, Dental implants, Peri-implant tissue