Osseous Grafting Part I: Autografts & Allografts for Periodontal Regeneration- A Literature Review

Ali Saad AlGhamdi, BDS, MS, FRCD(C); Othman Shibly, BDS, MS; Sebastian G. Ciancio, D.D.S

Abstract

Osseous grafting represents one mode of therapy to manage periodontal osseous defects. Materials for osseous grafting can be obtained for the same person (autografts), from a different person of the same species (allografts), from a different species (xenografts), or from synthetic materials (alloplasts).

The two types of grafts most frequently used in periodontal therapy are autogenous grafts and allografts. Both types can be obtained either intraorally or extraorally. They may be cancellous bone, cortical bone, or combinations of these. There has been a recent increase in interest in using xenografts and alloplasts.

Bone graft materials are generally evaluated based on their osteogenic, osteoinductive, or osteoconductive potential. Selection of graft material is based on operator preference, type and size of the defect, resorbability of graft material, cost, and patient acceptance.

In this review we discussed criteria for selection of graft material, factors influencing bone graft success, autografts, and allografts.