

Bone grafts for Dental Implants

Amar Bhochhibhoya¹

¹Lecturer, Department of Prosthodontics, Maharajgunj Medical Campus, Maharajgunj, Kathmandu, Nepal.

The long-term success of dental implants has established itself as an acceptable treatment choice for the replacement of missing tooth. In cases of extensive bone loss, the addition of bone grafts becomes mandatory prior to, at the time of and after implant placement. The biological principles behind the use of bone grafts and bone substitutes are osteogenesis, osteoinduction, osteoconduction and osteopromotion. These bone grafts and bone substitutes include autografts, allografts, xenografts, allografts, phytogenic materials, growth factor bone substitutes and bone substitutes with infused living osteogenic cells.¹

Among these, autograft is considered to be the gold standard.² The selection of the appropriate bone graft or its combination depends upon

the availability of the bone graft, its cost, the size of the bony defect, the mechanical strength and the absorption rate of the bone graft. The prosthodontist must be well acquainted with different types of available bone grafts which are being extensively used in the field of implant dentistry. The leap in the terrain of bone grafts is certain to be progressive and promising with the spark of 3D custom printing of bone and 4D bioprinting.

REFERENCES

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