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Bone regeneration of the maxilla with blocks of xenogenic origin- case report

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Key words: Bone augmentation of the maxillary ridge, Bone grafting, Bone Substitutes, Bone regeneration, Bovine bone mineral block, Case reports

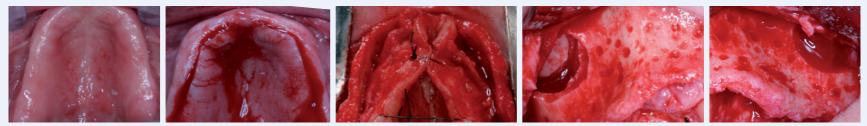
Objectives of the procedure

Bone reconstruction of the maxilla for the placement of implants.

Presentation of the case

Female patient, 50 years old, without systemic pathologies, smoker of 10 cig/day, with average bone crest thickness of ≤3 mm.

A linear incision was made between the teeth region 18 and 28, being full thickness flapped.



The bilateral maxillary sinus was elevated by the lateral window technique described by Cadwell-Luc, the xenograft blocks were fixed with screws on a xenograft bed and covered with collagen membranes to promote ROG by the principles described by Melcher. Sutured with single stitches (supramide 4/0) was performed.



Immediate results, short and medium term

After 10 months CT showed a bone gain that allowed implant rehabilitation as planned.

Discussion

In the first 2- to 3-year period after extraction, occurs a reabsorption of the original bone volume between 40-60% [1].

The gold standard for reconstruction with onlay bone blocks is autologous bone intra- or extra-oral [2]. Harvesting requires a second surgical site, increasing surgical time, risk of morbidity and patient discomfort [3], has a tendency to resorb, especially with extra oral origin, limiting the durability of bone augmentation [4,5]. To overcome these difficulties, the xenogens blocks are a good alternative in the reconstruction of the jaws, presenting biological proprieties of remodelling and incorporation into the native bone proven histologically and radiographically [6-10]. Hammerle et al. indicate that the waiting time for the second surgical phase is 9-10

months [7].

Conclusions

The use of xenogenic blocks presented excellent results in the increase of the bone volume avoiding the morbidity associated to the autologous blocks.

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XXVI Congresso Anual da Ordem dos Médicos Dentistas

16 a 18 de novembro 2017, Lisboa, Portugal