

Xenografts in orthopedics. The necessity of developing the use of xenografts

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Abstract

Purpose

This article has the purpose of presenting the importance of developing the use of xenografts considering the need of more and more surgical grafts as well as the difficulties and limits in both quantity and quality that are faced in autografts and allografts transplants.

Patients and Methods

In the last 12 months (June 2015 – June 2016), 13 patients needed the use of morselized graft or structural graft during the surgical interventions they suffered (primary and secondary joint replacement, conversion from partial joint replacement to total joint replacement, nonunions, vicious calluses, filling spaces after bone tumor ablation).

Four of them were treated with autografts, while the remaining nine benefited from allografts from the National Bank of Bone Transplant or morselized lyophilized graft.

For three of the patients who received allografts there was the need of rescheduling the surgery due to the great volume of the needed graft. All patients were supervised after surgery in consistency with the settled protocol.

Results

The functional results were very good, the grafts integrated in all cases in reasonable periods of time, except for one case, that needed a longer period of time due to an immunosuppressive treatment.

Conclusions

There is a need of developing tissue engineering in order to have access to unlimited quantities of grafts on time. Plus, there is the need of comparative studies between the use of autografts, allografts and xenografts in order to better understand the advantages and downsides of every option.

Keywords: *xenografts, allografts, autografts, tissue engineering*