

[Alloplastic cancellous bone replacement and fibrin glue in hand surgery]. [German]

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Abstract:

INTRODUCTION: Alloplastic replacement of cancellous bone is being increasingly used in the clinical setting. The use in hand surgery, however, is only sparsely documented.

MATERIALS AND METHODS: We report about the use of micro- and macroporous biphasic calcium phosphate granulate (Tricos ()) in combination with fibrin sealant (Tissucol ()) in six patients undergoing surgery of the hand involving cancellous bone deficits. The indications ranged from carpal stabilisation to DIP arthrodesis. Follow-up time was up to 15 months.

RESULTS: Because cancellous bone harvesting could be avoided, morbidity and the extent of surgery could be reduced in all patients. Healing was uneventful and the clinical course as documented by X-ray controls, toleration of physiotherapeutic exercises and stability was analogous to that of conventional surgery involving cancellous bone grafting.

CONCLUSION: These first results indicate that alloplastic replacement of spongiosa grafts, especially by micro- and macroporous biphasic calcium phosphate granulate can possibly be successfully used in surgery of the hand. The extent of bony remodelling still needs to be determined by further examination.