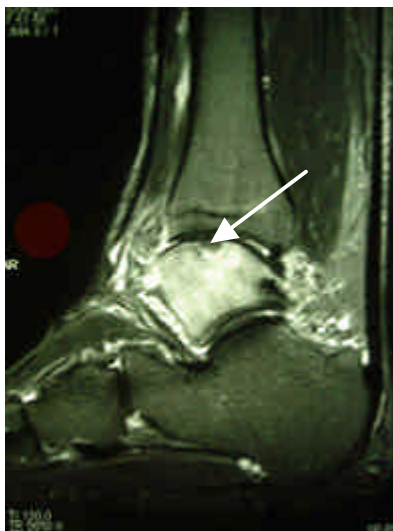


## Case Report: 7 months clinical follow-up after arthrotomic implantation of chondrotissue® in a cartilage lesion of the lateral talus

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**Objective:** A 43 year old male patient with a cartilage lesion at the lateral talus was treated with common microfracture technique in combination with a new cell free defect cover (chondrotissue® matrix, BioTissue AG) consisting of a resorbable polymer felt and hyaluronan [1].

**Method:** The cartilage defect of 0,7cm<sup>2</sup> in size and outerbridge-classification 4 (fig. 1) was treated in a standard arthrotomic procedure together with a fibula ligament reconstruction as a concomitant procedure. During arthrotomy the subtalar joint was opened and the chondral lesion was carefully debrided down to the subchondral bone. Next, standard microfracture procedure was performed. To cover the defect, the chondrotissue® matrix was immersed in 3ml autologous serum for 10 min and adapted to the size of the defect. In the next step, the chondrotissue® was placed into the defect and fixed with a 6,0-vicryl-suture. The patient underwent the standard rehabilitation program after microfracture. [2]



*Fig. 1 deep cartilage erosion (outerbridge-classification 4, white arrow) at the lateral talus*

**Results:** After 3 month postoperatively, the patient did not show any pain or discomfort. After 7 months, MRI showed 75-100% volume filling of the defect with hyperintense repair tissue and good peripheral integration (fig. 2, white arrow). Volume filling with cartilaginous repair tissue was graded on the basis of the percentage of the defect.



*Fig. 2 cartilage repair in the lateral talus 7 months postoperatively*

**Conclusion:** For this patient, the combination of common microfracture technique with the implantation of chondrotissue® matrix as a cell-free implant showed good cartilage repair in the talus. The use of chondrotissue® to cover the microfractured area may hold the blood clot in place, induce hemostasis and protect the underlying tissue. In a standard arthrotomic procedure this combined technique succeeded in repairing deep cartilage erosions at the lateral talus.

### Literature:

1. Erggelet C et al. Biomaterials 2007
2. Steadman JR et al. J Knee Surg 2002