Case Report: Treatment of a low grade malignant tumor in a proximal tibia with autologous bone and CERAMENT™G

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PATIENT
50 year old sporty patient with a history of 6 month knee pain; the radiological diagnostic showed a metaphyseal, epiphyseal osteolytic lesion at the proximal lateral tibia (Fig.1 and Fig. 2).

DIAGNOSIS
- A biopsy was carried out and the patient was diagnosed with a giant cell tumor (GCT) in the proximal left tibia, so surgical treatment was planned accordingly (Figs. 1 & 2).

TREATMENT
- Curettage of the tumor, followed by filling with CERAMENT™G and autologous bone (Fig. 3).
- During histological analysis of the samples sent after surgery, the diagnosis was changed to a low grade osteosarcoma.

OUTCOME
- At 6 weeks the start of bone remodeling can be seen (Fig. 4) throughout CERAMENT™ on an X-ray. At 3 months a 'puddle' sign is visible (Fig. 5), and this radiological appearance continues at 6 (Fig. 6) and 9 months (Fig. 7).
- At 1 year, an MRI shows that although the proximal part of the void originally filled with CERAMENT™ appears to be empty on X-ray, it does in fact contain some dark areas that indicate remodeling (Fig. 8).
- An X-ray at 1.5 years shows continued remodeling of CERAMENT™ into new bone (Fig. 9).
- The patient is clinically well and returned to sports (tennis) 6 months after the operation.
OUR MISSION is to provide an injectable radiopaque bone substitute that has been proven to rapidly remodel into bone, with the potential to be combined with other substances, and is capable of being delivered percutaneously.