Impinging cement body in uni-compartmental knee replacement & arthroscopic removal

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Six years after initially successful medial UKR, a patient presented with symptoms of pain and lateral catching. Radiographs showed good position, with no evidence of loosening, and bloods inflammatory markers were normal. No loose bodies were demonstrated on MRI.

Arthroscopic assessment was undertaken and a 15mm loose cement body was found in the lateral compartment. This was extracted with a tissue grasper. There were no articular erosions, and removal of cement resolved all symptoms.

UKR has become recognised as an option in arthritis with success rates 80-95%. Failure of surgery may be secondary to complications such as aseptic loosening / osteolysis and polyethylene wear. During cementation, care should be taken to remove all excess cement surrounding the prosthesis and various methods are described. However, with the advent of minimally invasive approaches, there has been stimulation of further interest, and change in risks such as cement extrusion not seen at time of operation; likely due to smaller incision.

Previous case reports have been made about the issues of retained cement after UKR and also about possibility of arthroscopic removal; although this was in the posterior compartment. Given the relatively high rate of conversion from UKR to TKR for pain, relatively simple, albeit rare, issues such as these should be ruled out before conversion is considered.

This case highlights the importance of considering extruded cement in cases of unexplained knee pain following otherwise successful UKR surgery, even when MRI is reported as normal, and furthermore, rectification with a day-case arthroscopic surgery.