

**Screw and cement augmentation of patella defects in knee arthroplasty**

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**BACKGROUND**

At primary and revision knee arthroplasty, a deficient patella with a contained or uncontained defect is often encountered,<sup>1,2</sup> especially in the presence of longstanding maltracking. In these cases, reconstruc-

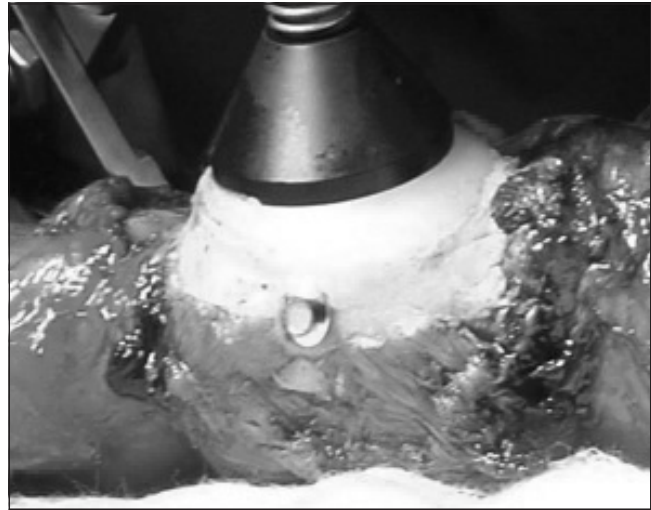
tion is difficult, leaving an unsupported implant. Following the good outcomes achieved using cement fixation of large defects of the tibial plateau augmented with screws,<sup>3</sup> we describe a technique to address patella defects in cases where patella tracking is a problem and would compromise the final result.

**TECHNIQUE**

After conservative bone resection of the patella, the residual defect can be assessed and augmented by screws using a 2.5mm drill to secure a desired number (one to four) of standard 3.5mm cortical screws in the defect. These are orientated to provide maximum support and also to enable placement of the patella trial component (Figs 1 and 2). The patella component is then cemented with the screw used as a scaffold to augment fixation to the bone (Figs 3 and 4).



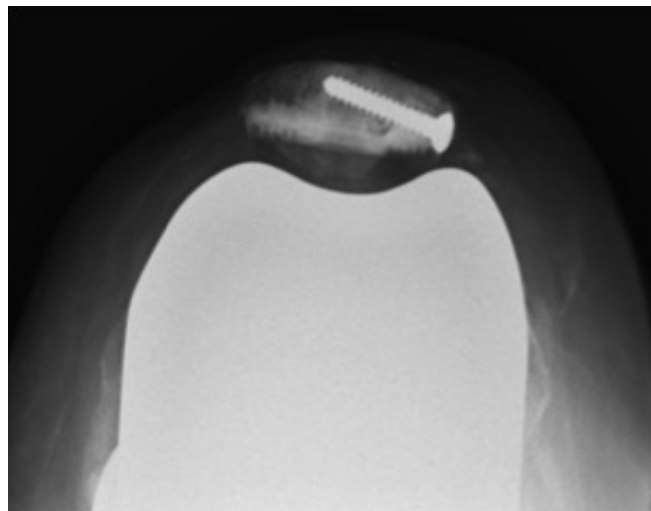
**Figure 1** Clinical photograph of prepared patella with uncontained defect



**Figure 3** Clinical photograph of cemented patella component with screw augmentation



**Figure 2** Clinical photograph of screw placement and patella trial component



**Figure 4** Radiography of the reconstructed patella at five-year follow-up appointment

**DISCUSSION**

In cases where the surgeon would prefer to resurface a deficient patella because the option of retaining the host would lead to maltracking, we have found this technique to be reliable, versatile and cheap to overcome the otherwise complicated scenario of patella deficiency. It avoids the risk of fracture by reducing the amount of bone that would otherwise be resected for a traditional fixation, and obviates the need for more cumbersome and expensive augmented patella implants, which have a poor track record.<sup>4,5</sup>

**CONFLICT OF INTERESTS**

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**A time and equipment saving tip for difficult urethral catheterisations**

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Inability to pass a urethral catheter is a common scenario in urology. Options include inserting a suprapubic catheter, using an introducer or railroading a catheter over a guidewire inserted via flexible cystoscopy. We describe a novel bedside technique using the atraumatic hydrophilic properties of Terumo (Egham, UK) guidewires. Insert the wire blindly down the urethra until two-thirds has been passed, guaranteeing that it lies in the bladder. Perforate the tip of a Foley catheter with a 16G intravenous cannula and railroad it over the guidewire. This safe technique negates the need for more invasive methods in

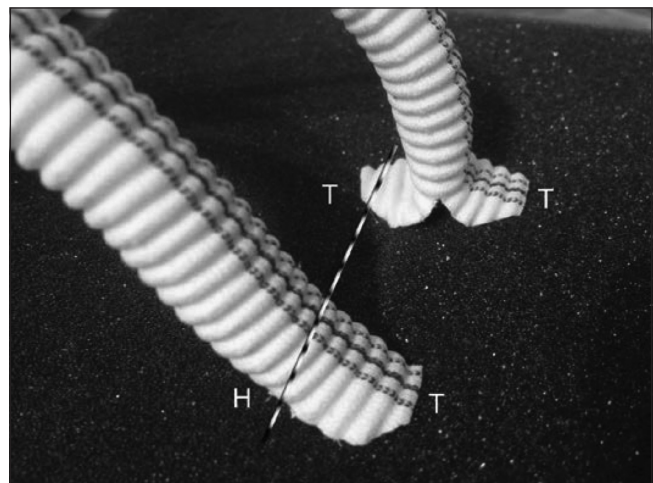
**The ‘two toe’ technique for femorofemoral bypass**

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During a femorofemoral bypass, the heel of a dacron graft may be compressed under the inguinal ligament, with the subsequent risk of occlusion. Furthermore, an additional patch may be required to close larger arteriotomies. The following technique addresses both these difficulties without incising the inguinal ligament. The graft is split into two ‘toes’, instead of a ‘heel’ and a ‘toe’. The inguinal ligament now lies over the superior toe of the graft instead of compressing the heel of the graft. The toes can be lengthened if the arteriotomy is extended into the profunda femoris, avoiding the need for a patch.



T = toe; H = heel

**Figure 1** The ‘two toe’ technique (background) is shown side by side with the conventional ‘cobra hood’ (foreground). The dotted line represents the inguinal ligament, which compresses the main body of the conventional graft but not the two toe graft