National Institute for Health and Care Excellence

IP1842 Supercapsular percutaneously assisted total hip arthroplasty for osteoarthritis

Response Com Consultee name Sec. no. **Comments** and organisation . no. Please respond to all comments Consultee 1 General The British Orthopaedic Association (BOA) has reviewed Thank you for your comment. 1 the consultation comments made by the British Hip The British Orthopaedic Society (BHS) and is in full support of their views and Association recommendations. It is the "skin" cuts described in this technique and Thank you for your comment. 2 Consultee 2 General different to a traditional hip replacement. The bony "cuts" British Hip Society are the same. The authors should compare the time of The Committee makes recommendations based on this proposed operation to a "standard" hip replacement to its assessment of the evidence on the efficacy and provide context. safety of this interventional procedure and it does not evaluate comparative effectiveness of different procedures for the same indication. The overview provides more details about individual comparative studies, including operative time. Consultee 2 2.3 The statement that this approach might lead to "less Thank you for your comments. 3 tissue damage" needs to be gualified as this is speculative British Hip Society 'Less tissue damage' has been removed from section 2.3. 2.5 needs clarification on "implant trial cup is placed into Thank you for your comment. Consultee 2 2.5 4 the acetabulum to allow access of instruments." What British Hip Society does this mean as it then goes onto state a second portal Section 2.5 has been changed to: "The femoral canal is made to permit access for reaming the acetabulum. No is then reamed and broached without dislocation. The comment is made about the potential damage to the femoral neck is osteotomised and the femoral head sciatic nerve which will be close to this second portal. removed. A trial cup is placed into the acetabulum attached to an external alignment jig. A second skin portal is made distally and posteriorly once the correct acetabular position is set. A cannula is

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				inserted to protect the adjacent sciatic nerve when using the power reamer. Once reamed, the acetabular components are inserted and a trial reduction done. The definitive components are inserted if the reduction is deemed satisfactory. The hip joint capsule is closed with a suture. Then the gluteal fascia and skin are closed with sutures."
5	Consultee 2 British Hip Society	2.6	If the approach is indeed limited to specific cementless implants on the femoral side this will prove a disadvantage as certain proximal femoral anatomical dimensions will not permit a cementless stem to accurately attain the correct version, offset and leg length compared to a cemented stem	Thank you for your comment. Section 2.6 has been changed to: " <i>This procedure</i> <i>uses a</i> specific <i>set of</i> implants and specialised instruments. Postoperative rehabilitation is recommended for muscle strengthening and mobility."
				Section 3.5 has been changed, please see the updated wording in comment 6.
6	Consultee 2 British Hip Society	3	 The quoted intraoperative fracture rate of 0.5 % is lower than usually quoted for cementless stems particularly in the more elderly patient. This needs clarification as a higher rate of intraoperative fracture might be expected with this new approach. What are the criteria of choosing suitable patients and if it can't be used for all patients is this not a disadvantage in training and resources? Using in the fractured neck of femur cohort seems unwise given trials on cemented versus uncemented stems have reported much higher fracture rates with the cementless stems. 	 Thank you for your comment. The intraoperative fracture rate of 0.5% is stated in one of the PEQs and the committee considered this information together with other published evidence included in the overview when making the recommendations. Section 3.5 has been changed to: <i>"The committee was informed that, for this procedure:</i> <i>suitable training and mentoring is needed</i> <i>templating and planning should be used to ensure that leg length offset and intramedullary sizing are appropriate</i>
			Day surgery hip operations have been reported from various UK centres using all varieties of surgical approach, so it appears to be multiple factors that	• mainly cementless implants are used, but other CE marked implants can be used

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			determine length of stay rather than just the surgical approach.	 the safety profile differs depending on the type of implant cementless implants might be associated with higher rates of intraoperative fractures." In terms of patient selection, the inclusion criteria for suitable patients were detailed in individual studies in the overview. The use of templating mentioned in section 3.5 also responds to this comment. This guidance covers the use of this procedure for patients with osteoarthritis of the hip but not fractured neck of femur.
				'A relatively short hospital stay' has been removed from section 3.6.
7	Consultee 2 British Hip Society	3	The Range of Movement is poorer in the SuperPath cohort, is this because the pathologically tight capsule is not addressed ? Paper quoted by Xie 2017 is now 4 years old and the length of time for the conventional posterior approach is unusually long at 106 minutes. The paper by Meng WK 2021 has a more normal time for the posterior approach reported at 66 minutes compared to the superpath 2 hours but was still a relatively small cohort at 40 patients. There was also less blood loss in the posterior cohort and no difference in length of stay.	 Thank you for your comment. The reasons for the range of movement outcomes were explained in individual studies when reported. The committee considered all outcomes from individual studies when making the recommendations. 'This procedure usually takes 2 hours' has been removed from section 2.6, and 'a relatively short hospital stay' has been removed from section 3.6.
8	Consultee 2 British Hip Society	3.3	The outcome should include an assessment of leg length post-surgery	Thank for your comment.

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				'Nerve palsy and leg length discrepancy' has been added to section 3.3.
9	Consultee 2 British Hip Society	3.5	Rather than suggesting mentoring a few cases, the authors should should seek to establish the learning curve for this procedure.	Thank you for your comment. 'For the first few cases' has been removed from section 3.5.
10	Consultee 2 British Hip Society	3.5	Why is templating limited to the learning curve, surely all operations are templated?	Thank you for your comment. Section 3.5 has been changed, please see response in comment 11.
11	Consultee 3 BAME Health Collaborative	3.5	This is a minimally invasive technique based on the posterior approach to the hip. For those familiar with the posterior approach, this will be an easier technique to adopt than those using the lateral or anteroateral approaches. Suitable training should be mandatory for all surgeons prior to adopting this approach to minimise complications but particularly for those converting from an anterolateral or lateral approach. Definitely agree that image intensifier and templating should be carried out prior to procedure. Also spinal imaging in standing and sitting to be considered to assess the spinopelvic alignment. This is required to minimise the risk of dislocation even though the capsule is preserved. The benefits of this procedure are short term. Less potential muscle injury will lead to less pain and faster recovery. Also reduced risk of dislocation as capsule is spared. However, this will not impact the longevity of the prosthesis and carries the risk of injury to the sciatic nerve. Those not adequately trained may inadvertently damage the gluteal muscles leading to a limp as well as pain.	 Thank you for your comment. Section 3.5 has been changed to: "The committee was informed that, for this procedure: suitable training and mentoring is needed templating and planning should be used to ensure that leg length offset and intra medullary sizing are appropriate mainly cementless implants are used, but other CE marked implants can be used the safety profile differs depending on the type of implant cementless implants might be associated with higher rates of intraoperative fractures." Spino pelvic tilt assessment is relevant to all hip replacements but not specific for this procedure.

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