National Institute for Health and Care Excellence

IP1181 – Open reduction of slipped capital femoral epiphysis
Consultation Comments table

IPAC date: Thursday 13th November 2014

Com. no.	Consultee name and organisation	Sec. no.	Comments	Response Please respond to all comments
1	Consultee 2: Specialist advisor	**1.1**	Difficult to accept that this procedure should have special arrangements for audit and consent when it has been performed for >20 years. It would be preferable if instead of this custom untried audit sheet that surgeons were obliged to enter their cases on a suitable database such as that of BSCOS or the Non-arthritis Hip registry. This would be analogous to the arrangements for FAI surgery which is somewhat related.	**Thank you for your comment** A Committee recommendation has been added to section 1 to state that clinicians should enter details about all patients undergoing open reduction of slipped capital femoral epiphysis onto the BSCOS register.

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2	Consultee 1: Specialist Advisor	**1.2**	To protect patients from well-intentioned enthusiastic surgeons and with regard to all patients being audited properly NICE should support the procedures being done in specialist centres and the use of BSCOS Registry to record all interventions. The present document raises the question of specific consent to perform procedures which we feel are unnecessary. These procedures should be recorded on the BSCOS SUFE database, which would allow outcome studies and identify problems	**Thank you for your comment** A Committee recommendation has been added to section 1 to state that clinicians should enter details about all patients undergoing open reduction of slipped capital femoral epiphysis onto the BSCOS register. In relation to patient consent, section 1.2 of the guidance states that clinicians wishing to perform the procedure should: “Ensure that patients and their parents or carers understand the potential outcomes of having or not having the procedure, in particular the risk of avascular necrosis and its consequences.”
3	Consultee 1 Aresh Hashemi-Nejad Specialist Advisor	**1.3**	Open reduction of SUFE procedures have a steep learning curve and to reduce risk of complications, surgeons who wish to undertake these procedure should visit and engage the expertise of specialist centres.	**Thank you for your comment** Section 1.3 of the guidance highlights the importance of training by stating that: “Training and experience are important in preserving the blood supply to the femoral head. When the procedure is performed with surgical dislocation of the hip, clinicians should undertake their initial procedures with an experienced mentor.”

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4	Consultee 1: Specialist Advisor	**1.5**	The management of stable slips (0% AVN in the absence of iatrogenic intervention) seems to be the group of patients who are most vulnerable and need protection from the "enthusiastic surgeon". The grounds for offering open osteotomy in stable slips are based on the anticipation of subsequent impingement but the procedures carry a significant risk of AVN whether done with or without a hip dislocation and regulation for this group is necessary. A RCT of open reduction v. conservative treatment, with or without a later extra articular osteotomy would be the only justification.	**Thank you for your comment** The last sentence of section 1.5 of the guidance has been changed to highlight the requirement for <u>any</u> type of subsequent hip surgery to be documented. The section now reads as follows: Further research into open reduction of slipped capital femoral epiphysis should clearly describe details of clinical presentation (e.g Loder classification), the degree of slip, its stability, and the surgical technique used; including whether surgical dislocation of the hip was performed. Outcomes from two years onwards should include degree of correction, occurrence of avascular necrosis and need for subsequent hip surgery (and its timing),
5	Consultee 1: Specialist Advisor	**2**	The inclusion of term open epiphysiodesis legitimises their use and these arcane terms should be removed.	**Thank you for your comment** The term “open epiphysiodesis” has been removed from the procedure description. The study that referred to “open epiphysiodesis” (Szypryt, 1987) in table 2 has been removed and added to appendix A.

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6	Consultee 1: Specialist Advisor	**2**	The document on the web site does seem to unconsciously confuse two very different problems; i.e. Stable (Chronic) versus Unstable (or acute). The use of Eponymous names is unhelpful and generic descriptions including "open replacement/reduction "Antero-lateral approach" "Surgical dislocation" should be used.	**Thank you for your comment** The Overview differentiates chronicity and stability of the SCFE. The clinical presentations of patients were reported in the Overview and IPCD as stated by the authors. Eponymous names have been removed from the efficacy and safety sections of the IPCD. In the overview, the beginning of the procedure description has been changed to: “The procedure can be done in a variety of ways (some with eponymous names such as the Dunn, Bernese and Ganz approaches). Most involve a cuneiform (wedge-shaped) osteotomy of the femoral neck. An important point of technique is whether or not the hip is surgically dislocated during the procedure.” Section 2.2 has been edited to include reference to the management of acute slips “. For more severe acute slips, treatment options include open fixation of the growth plate using a bone graft combined with early intertrochanteric osteotomy to allow a full range of hip movement, or closed reduction and in-situ fixation with cannulated screws or Kirschner wires”.
7	Consultee 1: Specialist Advisor	**4**	The document confuses conditions by mentioning Stulberg outcomes in the context of SUFE - a measure of femoral head roundness can be referenced using Mose rings	**Thank you for your comment** The Stulberg classification system is only referred to in section 4.6 as a direct quote from a specialist adviser. This is consistent with NICE policy. .

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8	Consultee 1: Specialist Advisor	**4**	There are difficulties with conventional scoring systems for example the Merle d'Aubigne is a score designed unilateral disease. 25% of score relies on normal contralateral side to calculate % loss of movement and in sufe 40% can have contralateral involvement at time of (Matta JM. JBJS 1996;78A:1632) We recommend alternative evaluation i.e. Adolescent version of Pediatric Outcomes Data Collection Instrument (PODCI). This is a well-validated musculoskeletal instrument in adolescents designed for the follow-up of orthopaedic disease. POSNA/PODCI (Pediatric/Adolescent) Instruments. American Academy of Orthopedic Surgeons. (Accessed May 2014)(Available from: http://www.aaos.org/research/outcomes/outcomes_peds.asp). Klepper SE. Measures of pediatric function: Child Health Assessment Questionnaire (C-HAQ), Juvenile Arthritis Functional Assessment Scale (JAFAS), Pediatric Outcomes Data Collection Instrument (PODCI), and Activities Scale for Kids (ASK). Arthritis care & research. 2011; 63 Suppl 11:S371-82. 2. Non-arthritic hip score. This is also a well-validated measure of hip function in adolescents and young adults. Christensen CP, Althausen PL, Mittleman MA, et al. The nonarthritic hip score: reliable and validated. Clin Orthop Relat Res. 2003; (406):75-83.	**Thank you for your comment** Outcome measures, including Merle d'Aubigne scores were reported as stated by the authors. The reference to Merle d'Aubigne scores has been removed from section 4.1 of the guidance. Suggested outcome measures (PODCI and the Non-arthritic hip score) have been added to efficacy outcome measures section (section 4.6) on the basis of specialist advice now provided.

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9	Consultee 1: Specialist Advisor	**4 & 5**	Open reduction for unstable slips has been multiply reported (anterior approach (J Bone Joint Surg Br. 2006 Oct;88(10):1379-84.) (J Pediatr Orthop. 2009 Jan-Feb;29(1):1-8.) For surgical dislocation and reduction in unstable hips, however , the rate of avn of 0% has not been produced by anyone else except Ganz ,importantly, a paper pooling 5 centres showed an avn rate of 26% (JBJS Am 2013 Apr 3;95(7):585-91) .	**Thank you for your comment** Study 1: Biring et al. (2006) was not included in the initial search results due to the author's use of an eponymous name to describe the procedure. The study has been added to appendix A because larger studies are available in table 2. Study 2: Parsch et al. (2009) is already included in table 2 of the overview. Study 3: Sankar et al. (2013) was not included in the initial search results because an additional search term was not identified. A revised search has been performed. The Sankar study has been included in table 2 to replace a smaller study (Alves et al, 2012) that reported similar outcome measures