NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

INTERVENTIONAL PROCEDURES PROGRAMME

366 – Arthroscopic knee washout, with or without debridement, for the treatment of osteoarthritis
Comments table

IPAC date: Thursday 14th June 2007

Comment no.	Consultee name and organisation	Sect. no.	Comments	Response Please respond to all comments
1	Individual clinician	**1**	I think there is evidence on safety but I am concerned that there is insufficient RCT evidence comparing long term efficacy of arthroscopic washout to other EULAR recommended interventions for knee osteoarthritis. This statement is contradicted by the efficacy section below. What proportion of people who have artroscopic washout & debridement, go on to have a knee joint replacement?	Noted, thank you. Only three studies reported on the proportion of patients who require knee replacement (2.3.2)
2	Individual patient and Arthritis Care volunteer	**1**	I agree with this statement. I have had this procedure and I have found it beneficial.	Noted, thank you.
3	British Association for Surgery of the Knee	**1**	We agree that washout alone should not be used as treatment for OA knee. Arthroscopic debridement has a role in the management of EARLY OA knee but is not good practice in established OA. The problem is how to define early as opposed to established OA - X-rays not always adequate.	Noted, thank you. The inclusion criteria varied between studies and only 2 studies stratified results by disease severity. The Committee added 'Patient selection is difficult and there is very little evidence to guide selection' to section 2.2.2.They also added that the Specialist Advisers '…noted that patient selection is important, for example patients with early osteoarthritic changes and those with large effusions.' in section 2.3.3.

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4	Specialist Adviser	**2.1**	As Said It is difficult to predict the response. Mechanical symptoms are more effectively treated. There is also a strong placebo response depending on the Surgeons personality!! Thus controlled trials are prone to inherent weakness.	Noted, thank you.
5	Individual clinician	**2.1**	There are other non- invasive interventions such as exercise programmes (not necessarily physiotherapy directed), weight loss, orthoses, acupuncture. Patients and professional stakeholders should be able to refer to NICE guidelines and make informed choices based on a comparison between all the different NHS treatments, before opting for invasive procedures	2.1.2 states that conservative measures include medication and physiotherapy. It is not a definitive list of possible treatments.
6	Individual patient and Arthritis Care volunteer	**2.1**	I have had 2 knee arthroscopic procedures in the last 12 months. I have had some pain relief from both procedures. I am currently awaiting assessment for a knee replacement so the indications above compare favourably with what treatment options I have been offered so far.	Noted, thank you.
7	British Association for Surgery of the Knee	**2.1**	If conservative treatment has failed patients should be offered TKR if x-rays show established OA [bone on bone].There is no place for any arthroscopic procedure in this situation. Patients with fixed varus or valgus deformity are also unlikely to benefit. Patients who should be considered for arthroscopic debridement are those with localised pain, tenderness and/or mechanical symptoms whose xrays show early change [only partial narrowing of joint space? use ahlbach grades etc.] MRI may show meniscal tear etc.	The inclusion criteria varied between studies and only 2 studies stratified results by disease severity. The Committee added 'Patient selection is difficult and there is very little evidence to guide selection' to section 2.2.2.They also added that the Specialist Advisors '…noted that patient selection is important, for example patients with early osteoarthritic changes and those with large effusions.' in section 2.3.3.
8	Specialist Adviser	**2.1.2**	As an advisor on this subject for NICE I wonder whether it would be best to omit the last paragraph of section 2.1.2 because the evidence for the effectiveness of	This point was raised at the first consultation. The response was as follows:

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			corticosteroids and hyaluronic acid is simply not there to support them and there is the risk of both allergy and infection. I can provide you with references if you wish. What I am saying is that NICE cannot really condone, support or compare potential dangers or ineffectiveness on alternative treatments and therefore I would remove that last paragraph and in the future consider a NICE investigation/advice on those 2 medical injection treatments. References: Kaspar S, De V de Beer J. Infection in hip arthroplasty after previous injection of steroid. J Bone Joint Surg [Br] 2005; 87-B:454-7. Papavasiliou AV, Isaac DL, Marimuthu R, Skyrme A, Armitage A. Infection in knee replacements after previous infection of intra-articular steroid. Bone Joint Surger [Br] 2006; 88-B;321-323. Altman RD, Moskowitz R. Intra-articular Sodium Hyaluronate …Journal of Rheumatology 1998; 25:11:2203. Pham T, Le Henanff A, Ravaud P, Dieppe P, Paolozzi L, Dougados M. Evaluation of the symptomatic and structural efficacy of a new hyaluronic acid compound, NRD101, in a comparison with diacerein and placebo in a 1 year randomised controlled study in a symptomatic knee osteoarthritis. 2004 Dec;63(12):1611-7.	The IPAC specialist member advised that 'the use of corticosteroids particularly in inflammatory disease of the knee which may be based on osteoarthritis is well established. If there is imminent intention of a total knee replacement then it is contra-indicated.' The Committee changed the sentence in section 2.1.2 'Corticosteroids or hyaluronic acid may be injected into the knee joint' to read that they 'are sometimes' used.

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9	Individual clinician	**2.2**	Well point 2 seems to say it's ok to go on doing arthroscopic washouts anyway, even though there is no evidence of benefit! What proportion of arthroscopic washouts would usually include debridement? Could this encourage surgeons to do a "little" debridement to justify the procedure?	2.2.2 states that 'It is difficult to predict before arthroscopic washout which patients will have lesions suitable for debridement.'
10	Individual patient and Arthritis Care volunteer	**2.2**	I agree with this statement. The proceedure should be explained fully to the patient - including a full explanation of what the proceedure entails.	Noted, thank you.
11	British Association for Surgery of the Knee	**2.2.2**	2.2.2 Exactly - therefore only consider arthroscopic surgery in very selected patients with indications as above.	The Committee added 'Patient selection is difficult and there is very little evidence to guide selection' to section 2.2.2.They also added that the Specialist Advisors '…noted that patient selection is important, for example patients with early osteoarthritic changes and those with large effusions.' in section 2.3.3.

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12	Individual clinician	**2.3**	The largest study showed no significant differences in pain or function. The other studies seem too small to influence national policy and no p value is given for the small positive study comparing debridement to arthroscopy alone. This is a common procedure, so why are these studies so small? I cannot see that this procedure can be recommended by NICE=- - sometimes even established procedures should be challenged if there really isn"t the evidence to back them up- the HTA could commission a high quality study comparing this with other non-invasive treatments. I am concerned that as private providers move in to compete with NHS providers, there could be an increase in arthroscopies, only for a sizeable portion of patients to end up having knee replacements anyway. There is an increasing number of people with chronic knee pain- cf the published million women survey demonstrating the clear link between increased BMI and joint replacement and other large population studies suggesting a similar trend- so the demand for treatment will increase and investing in more arthroscopies is probably not the best use of resources	Assessment of cost-effectiveness is not within the remit of the Interventional Procedures Programme.
13	Individual patient and Arthritis Care volunteer	**2.3**	I agree with this statement. Although I have some pain relief and reduction of mechanical symptoms. Physiotherapy (Hydrotherapy) should also form part of rehabilitation for the patient to compliment the improvement made by the procedures	Noted, thank you.

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14	British Association for Surgery of the Knee	**2.3**	Most of the above RCTs do not stand up to close scrutiny because of ill defined grading of OA. We would suggest that there is no good evidence that washout gives any sustained benefit at all and that debridement is likely to offer benefit only in early OA with unpredictable results even in this group and should be recommended with caution.	The Committee added 'Patient selection is difficult and there is very little evidence to guide selection' to section 2.2.2.They also added that the Specialist Advisors '…noted that patient selection is important, for example patients with early osteoarthritic changes and those with large effusions.' in section 2.3.3.
15	Individual patient and Arthritis Care volunteer	**2.4**	In my experience, the safety protocol for this procedure was strictly implemented by my health care team. Support stockings etc were provided along with advice on elevation of affected limb and what to do if problems (excessive swelling) arose.	Noted, thank you.
16	British Association for Surgery of the Knee	**2.4**	Agree	Noted, thank you.
17	Individual patient and Arthritis Care volunteer	**2.5**	I have no knowledge of this procedure. However in the case of Osteoarthritis I have found it very helpful.	Noted, thank you.
18	British Association for Surgery of the Knee	**2.5**	Not appropriate for RA.Microfracture inappropriate in all but earliest stages of OA.	Noted, thank you.

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19	Specialist Adviser	**General**	This is a very common procedure carried out in the UK but is not always successful. In our experience at The Royal National Orthopaedic Hospital trust, patients who have a large effusion and known osteoarthritis tend to benefit significantly from this procedure. Patients with dry knees but osteoarthritis tend to have a less pleasing result. I certainly think it is safe, I think it is a worthwhile treatment and can benefit patients and it reduces the inflammatory process within the arthritic knee once all the debris has been washed out. I would support its use in the right indications.	Noted, thank you.
20	S. H. White Consultant Orthopaedic Surgeon	**General**	There is poor evidence for efficacy of steroids and hyaluronic acid as conservative treatment for osteoarthritis. <u>Intra-articular steroid injections</u> Steroids have traditionally been injected into knees by rheumatologists and general practitioners and occasionally orthopaedic surgeons but with no good evidence of effectiveness beyond just a few weeks and plenty evidence of its potentially severe ill effects. Recent negative evidence is as follows: After a single intra-articular steroid injection of the hip before hip replacement, a significantly increased risk of post operative infection has been observed (Kasper and De V de Beer 2005). Similarly, in a study of osteoarthritic patients under going knee replacement, the group who had received an intra-articular steroid injection pre operatively had a 22% wound complication rate after surgery compared to 11% in the controlled group	This point was raised by the same consultee at the first consultation. The response was as follows: The IPAC specialist member advised that 'the use of corticosteroids particularly in inflammatory disease of the knee which may be based on osteoarthritis is well established. If there is imminent intention of a total knee replacement then it is contra-indicated.' The Committee changed the sentence in section 2.1.2 'Corticosteroids or hyaluronic acid may be injected into the knee joint' to read that they 'are sometimes' used..

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			(Papavasiliou 2006). A systematic review on the Cochrane data base of 2006 by Bellamy evaluated the efficacy of intra-articular corticosteroids in treatment of osteoarthritis of the knee and looked at 28 trials, 1,973 participants. They showed short term benefits of steroids up to 4 weeks post injection and recommended future trials should have standardised outcome measures, assessment times run longer, investigate different patient sub-groups and clinical predictors but did not confirm longer term benefits. They certainly observed discrepancies between the RevMan 4.2 analysis and the original publication. Osteoarthritis is progressive by definition and therefore to provide benefit for no longer than 4 weeks but with risks of infection the treatment is irrational and dangerous on the current evidence. <u>Hyaluronic acid injections</u> Hyaluronic acid too has been subject to positive publication bias and drug manufacturers sponsorship. A good example of this is in the often quoted paper by Altman RD and Moskowitz R. It is very apparent from the graphs that marginal if any benefit was provided by hyaluronic acid compared to placebo and analysis of the statistics shows that there were many points in time that effects were measured. On some occasions there was no statistical difference and on other occasions there was statistical difference and the authors chose to quote only those points where there was statistical difference to support their conclusion. This has been much vaunted by the manufacturers as proof of the efficacy which	

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			defies common sense when looking at the graphs. Any benefit is marginal or non existent. More recent independent objective studies by Dieppe et al, (Pham T et al 2004) show that after a year of hyaluronic acid treatment joints deteriorated with no significant benefit from the hyaluronic acid compared to placebo. There are many other studies but I would need more time to access them. For instance, hyaluronic acid is known to have a fairly high incidence of adverse reactions due to allergy sensitisation after the first injection and there are other papers on the outcome of steroid injections of the knee showing acute septic arthritis. These days with so much attention in the media and in clinical experience to MRSA and other difficult to treat bacteria, one should be very cautious about "**popping in an injection to the knee**" in a GP's surgery or in out-patient context.	