Short Question:

Specific Question:

In adults with chronic trochanteric bursitis is physiotherapy more effective in reducing pain than usual care?

Clinical bottom line

Corticosteroid Injection therapy for trochanteric pain syndrome gives better short term relief (one moth) than exercises. However in the long terms (15 months) radial shock wave therapy and home training were more successful than steroid injection.

(Guidance from NICE suggests that radial shock wave therapy should only be used in special arrangements for clinical governance, consent and audit or research)

Why is this important?

Trochanteric bursitis is a disabling condition for patients. It can be difficult to treat effectively. Patients tend to have on going pain and loss of sleep. It can affect their ability to walk and undertake functional activities.

Inclusion Criteria

	Description	Search terms
Population and Setting	Adults, community or physiotherapy setting	Adults, tendonopathy, gluteus medius syndrome, greater trochanter, lateral hip pain, bursitis, hip, greater trochanteric pain syndrome, gluteal tendonopathy
Intervention or Exposure (i.e. what is being tested)	Physiotherapy	Physiotherapy, manual therapy, physical therapy, acupuncture, massage, exercises, stretches, posture, electrotherapy, ultrasound, Trancutanoues nerve stimulation, interferential, short wave therapy, megapulse, pulsed electro magnetic energy, biomenchanics, gluteal strengthening, gluteal stretching, soft tissue release, soft tissue mobilisation,
Comparison, if any	Usual care	Injection therapy, steroids, non steroidal, analgesia, advice

CAT Lead: Caroline Oakley
Email:

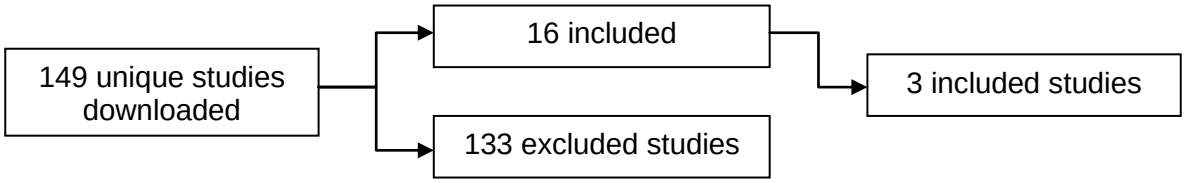
Date CAT completed: April 2013
Date CAT to be reviewed: April 2014

Outcomes of interest	Pain, function, sleep pattern Quality of life,	
Types of studies	SR & RCTs only	

Search time frame 2012- 2002

Databases Searched	**Date of last search**	**No. downloaded**
Clinical Evidence		
The Cochrane Library		
Medline		
Cinahl		
Embase		
PsycInfo		
AMED		
OT Seeker		
PEDro		
Web of Science	Total 149	

Results



CAT Lead: Caroline Oakley
Email:

Date CAT completed: April 2013
Date CAT to be reviewed: April 2014

First Author, year and type of study	Population and setting	Intervention or exposure tested	Study results	Assessment of quality and comments
Buono DA 2012 Systematic review	14 studies (n= 633) included 1 prospective study, 2 rcts, 11 retrospective case series	prospective study, rcts and retrospective case series investigation interventions for Trochanteric syndrome. Non operative and operative	relevant search of appropriate database identified 14 studies, overall studies identified as low to moderate quality	Poor quality, included non rcts
Lustenberger et la 2011 Systematic review	24 articles included	Non operative and operative management .follow up ranged from 4 months to 4 years, 970 hips in 950 patients.	34% returned to normal activity, 40% had significant improvement. Suggests that most patient benefit from a single corticosteroid injection, evidence less supportive for home exercise programme	Authors identify lack of good quality literature and variation in outcome measures used
Rompe et al 2009 RCT	Secondary care	Home exercises, steroid injection and radial shock wave therapy	*The results one month from baseline showed that patients treated with a corticosteroid injection were significantly better that home training or shock wave therapy. At 4 months shock wave therapy led to significantly better results that home training and corticosteroid injections. 15 months from baseline shockwave therapy and*	Reasonable quality

Summary

Bouno et al 2012 – Systematic review, relevant search of appropriate database identified 14 studies, overall studies identified as low to moderate quality. No search for gray literature, but reference lists explored. 2 reviewers examined English, Spanish, French and Italian publications. Coleman methodology score used to determine the quality of the article for inclusion. Had process in place for disagreement between reviewers. **14 studies (n= 633) included 1 prospective study, 2 rcts, 11 retrospective case series.** Variable outcome measured used. (One rct had 65 participants, other had 229). Most relevant article included was a quaisi RCT (Rompe et al) allocated 229 patients to home training, injection and radial SWT. Home training included progressive slow repetitive exercise incl periformis, stretch ITB standing stretch, SLR wall squat with ball and glut strengthening. At one month injection significantly better than home training, at 4 month radial SWT was better than home training and injection, at 15 months, SWT , home training both belter than injection. Treat results with caution as only 2 rcts in this review, most hasd short follow up and small number in non randomised studies

Lustenberger et al 2011- Systematic review to examine the efficacy of treatment. Appropriate search in English only, no gray lit searched. 2 authors reviewed papers. Expert opinion, review articles and case series with less than 5 patients were excluded. 24 articles included, follow up ranged from 4 months to 4 years, 970 hips in 950 patients. Highlights Rompe – assigned 76 patients to 6 weeks of home training, 34% returned to normal activity, 40% had significant improvement. Suggests that most patient benefit from a single corticosteroid injection, evidence less supportive for home exercise programme
Identifies inconsistency in making diagnosis within the studies which makes comparison difficult. Authors identify lack of good quality literature and variation in outcome measures used

Rompe J.D et al 2009*. This study involved 229 patients being randomly assigned to 3 treatment procedures: home exercises, corticosteroid injection and shockwave therapy. The results one month from baseline showed that patients treated with a corticosteroid injection were significantly better that home training or shock wave therapy. At 4 months shock wave therapy led to significantly better results that home training and corticosteroid injections. 15 months from baseline shockwave therapy and home training were significantly more successful than corticosteroid injection. Identifies the role of corticosteroid needs to be reconsidered. Use of home training or radial shock wave therapy might depend on resources available.*

National Institute for Health and Clinical Excellence 2011*- Provided guidance that extracorpeal shockwave therapy (ESWT) for refractory greater trochanteric pain syndrome is limited in quality and quantity. Overview was based on two non-randomised comparative studies (Rompe et al 2009 and Furia et al 2009). Recommends it should only be used in special arrangements for clinical governance, consent and audit or research.*

CAT Lead: Caroline Oakley
Email:
Date CAT completed: April 2013
Date CAT to be reviewed: April 2014

Conclusions (more detailed than Clinical Bottom Line)

A good quality (n=229) rct of patients with unilateral trochanteric pain syndrome suggests that injection therapy was significantly better than home exercise at one month follow. But at long term follow up (15th months) radial shock wave therapy and home training were more successful than steroid injection.

Guidance from NICE suggests that radial shock wave therapy should only be used in special arrangements for clinical governance, consent and audit or research.

Two systematic reviews of relative poor quality suggest that other interventions such as injection therapy and radial short wave therapy may be more effective than home based exercise programme (where home exercise programme included progressive slow repetitive exercise, periformis stretch, ITB standing stretch, SLR, wall squat with ball and gluteal strengthening.

References for included studies

Del Buono A Papalia R Khanduja V Denaro V Maffuci N 2001 Management of the greater trochanteric pain syndrome: a systematic review British Medical Bullitin 102 115-131

Lustenberger DP NG VY Best TM Ellis TJ 2011 Efficacy of treatment of trochanteric bursitis:s systematic review

National Institute for Health and Clinical Excellence. Extracorpeal shockwave therapy for refractory greater trochanteric pain syndrome. 2011

Rompe J.D., Segal N.A., Cacchio A., Furia J.P., Morral A., Maffuli N. (2009) Home training, local corticosteroid injection., or radial shock wave therapy for greater trochanter pain. *The American Journal of Sports Medicine 37(10), p1981-1990*

CAT Lead: Caroline Oakley
Email:

Date CAT completed: April 2013
Date CAT to be reviewed: April 2014