

INJECTION NUMBER ONE (JJ) – TROCHANTERIC BURSITIS

Initial assessment

Patient was assessed in presence of supervisor who is General Practitioner With Specialist Interest (GPWSI).

History of complaint

45 year old female with 6 month history of lateral right hip pain. No preceding trauma and pain was of insidious onset. Pain at worst was scored as 6/10 on the Visual Analogue Scale (VAS). The patient had been receiving physiotherapy for rehabilitation following left knee Anterior Cruciate Ligament reconstruction surgery in April 2008. Their physiotherapist referred the patient to the Musculoskeletal clinic with a possible right hip trochanteric bursitis.

Aggravating factors included lying on the right side and walking. The hip was painful at night especially when laid onto the right side and is worse towards end of the day when the patient has been active.

Eased with rest, diclofenac.

Past Medical history

The patient was involved in a Road Traffic Accident (RTA) in 1988, when they came off their motorbike and ruptured the Anterior Cruciate Ligament of left knee and had reconstructive surgery six weeks after initial injury. As a result of RTA also developed low back pain, which flares up from time to time with associated right leg sciatica.

The patient had a revision surgery for the left knee ACL reconstruction as the initial ligament reconstruction had failed; this surgery was carried out in April 2008.

Drug History

Diclofenac, Co-codamol. The patient denied any specific allergy to local anesthetic and any other medication.

Social History

Occupation is checkout supervisor at Tesco Supermarket. This role involves a lot of standing and walking, which certainly aggravates the lateral hip pain.

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Hypersensitivity to local anesthetic or steroid.	Not present
Sepsis (local or systemic)	Not present
Fracture site	Not present
Prosthetic joint	Not present
Reluctant patient	Patient informed and compliant check

Relative contraindications were also checked

Relative contraindications	Checked
Diabetes	Not present
Immunosuppression	Not present
Large tendinopathy	Not applicable, but also not present elsewhere in body
Bleeding disorder	Not present
Anticoagulation therapy	Not present
Haemarthrosis	Not joint injection, but MRI scan ruled this out.
Psychogenic pain	Clinical reasoning diagnosed trochanteric bursitis and also MRI of hip confirmed this

The patient was set up injection of the right trochanteric bursa; this was carried out according to the Aseptic technique. The procedure used is outlined below.

1. Patient was selected and diagnosed with Right Hip trochanteric bursitis as outlined.
2. They were positioned in left side lying, for comfort and accessibility on the lateral side of the right hip, the left leg extended and right knee slightly flexed as outlined by Saunders & Longworth 2006.

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3. Assembly of equipment. The date of drugs was checked and batch numbers recorded for both local anesthetic and steroid. A 5ml syringe and three 21 g needles selected.
4. Hand washed in soap and water.
5. Drugs drawn up –20 mg of Adocortyl was drawn up with a 21g needle. The needle was then changed and 2ml of lidocaine was drawn up to make a total volume of 4ml. The needle was then changed and left with sheath on to ensure aseptic technique.
6. The lesion was then identified with confirmatory palpation around the greater trochanter. It was then marked with an empty needle sheath.
7. The hands were washed with alcohol rub again.
8. The skin over the right hip over the marked site was cleaned with mediswabs.
9. The patient was asked if they were comfortable and pre-empted with insertion of needle verbally by warning of 'sharp scratch going in'. The skin was then slightly stretched and the needle inserted gently till it abrupted against bone then it was slightly withdrawn. A Safety aspirate was applied to ensure that the needle was not in a blood vessel. The injection was then delivered in a peppering technique. The needle was then withdrawn and compression over the needle site applied with cotton wool to stem any blood flow, which in this case there was not, a small plaster was applied over the needle site.
10. The patient was then re-assessed 5 minutes post injection, their pain had decreased to 3/10 on the VAS scale, this was specific to palpation of over the trochanter. The patient was advised relative rest and minimization of irritating factors. It was also necessary for the patient to have a seat in the waiting area for 30 minutes to ensure there was no adverse reaction, particularly that there was no anaphylaxis.

Re-assessment two weeks post injection

The patient reported that their pain had markedly decreased for the first week; they had noticed this significantly overnight as they had not been woken with pain over the lateral aspect of the hip. They had also not had as much pain at the end of their shift at work. Patient scored their pain score at worst as 2/10 on the VAS.

On assessment there was some slight tenderness of the area over the right greater trochanter. Still pain with end range passive over pressure of medial rotation and abduction.

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Patient had been made aware that it might be necessary for more than one injection of the site in order to resolve or significantly improve symptoms. Review appointment was set for another four weeks. The supervising clinician (GPSwi) advocated this approach, as they would normally see patient's six week post injection of trochanteric bursa. The reasoned that this length of time would allow for assessment of benefit of injection and also dictate whether further injection of the lesion would be necessary.

Reflective practice

Although the diagnosis was made prior to the MRI scan, this proved useful to rule out any perhaps more sinister lesions. This reminded me as a clinician to be aware of other perhaps non-musculoskeletal lesions and also the key role that imaging or investigation can play prior to applying use of injection therapy.

The supervisor advocated the use of Adocortyl, as they preferred its use for injection of bursa rather than kenalog. The rationale for this was because of the larger volume required for this injection (Saunders & Longworth, 2006).

The patient was made aware prior to the injection that the chances of success were in the region of 60%; the supervisor made this statement. But there is documented evidence given by Cohen et al, 2005 to support the figure being in the region of 60-100%. This relates nicely to the evidence that there could be in the region of 21 bursa around the hip and that injection has a high rate of failure of 'injectate' to reach correct area (Cohen et al, 2005).

The technique employed is a peppering technique as already mentioned the area injected was large as confirmed by palpation and the MRI scan. The bathing of the tissue around the bursa is commonly achieved and shown to be effective (Cohen et al, 2005).

One factor that could be relevant to this patient is obesity as evidence shows that more than one injection may be necessary as there is evidence that chances of accuracy for injection site are reduced with obese patients (Cohen et al, 2005). Although the authors Cohen et al do not actually quantify what constitutes obesity, so it is not possible to relate these findings to the patient. But it is a factor to be aware of when clinically reasoning.

The chances of success of injection of trochanteric bursitis have been shown to be influenced by the severity and duration symptoms. So the less severe the symptoms and less chronic the more likely a successful outcome with steroid injection (Lievence et al, 2005). In the case of this patient the time elapsed since the initial onset (6months) had allowed for the symptoms to become more severe. There had also been the delay associated with gaining the right hip MRI scan, although necessary this had lengthened the time of symptoms. In the ideal clinical scenario it

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would have been more favorable for the patient to be seen more acutely, to increase chances of injection being successful. What this may mean is that further injection therapy may be indicated at the six week review.

The optimal effect of the steroid may not have been achieved at the two week review as it is known that the benefits can continue for 3 weeks- 3months (Saunders & Longworth, 2006). But the initial two week follow up results are encouraging and would suggest that some of the steroid did reach the inflamed lesion.

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Recording the Injection - proforma 2

INJECTION RECORD [2]											
PATIENT ID						DIAGNOSIS (RITACLOXAMINE 0.5%)					
STEROID <i>Relocort</i>						LOCAL ANAESTHETIC <i>Lidocaine</i>					
Batch No			<i>2731044</i>			Lot No			<i>7046616</i>		
Expiry Date			<i>5/12</i>			Expiry Date			<i>6/12</i>		
Dose (mg)			<i>2000</i>			Volume (ml)			<i>2000</i>		
						Total Volume (ml)			<i>2000</i>		
						Strength (%)			<i>1%</i>		
Checked <input checked="" type="checkbox"/>						Checked <input checked="" type="checkbox"/>					
Needle length (mm)			16 <input type="checkbox"/> 25 <input type="checkbox"/> 40 <input type="checkbox"/> 50 <input type="checkbox"/> 90 <input checked="" type="checkbox"/>			Gauge			21 <input checked="" type="checkbox"/> 23 <input type="checkbox"/> 25 <input type="checkbox"/>		
						Green			Blue		
						Orange					
ABSOLUTE CONTRAINDICATIONS						ABSENT			ABSENT		
Infection local/joint/systemic						<input checked="" type="checkbox"/>			Poorly controlled diabetes		
Hypersensitivity to drugs/allergies						<input checked="" type="checkbox"/>			Anxious/'the doesn't quite fit' patient		
									Children/adolescent		
CAUTION									Pregnancy/breast feeding		
Recent trauma to affected area						<input checked="" type="checkbox"/>			Prosthetic joint		
Haemarthrosis						<input checked="" type="checkbox"/>			Other (please specify)		
Immunosuppression - steroids/disease						<input checked="" type="checkbox"/>			<i>Had Oligoarthr. with steroid therapy</i>		
Anticoagulant therapy/bleeding disorders						<input checked="" type="checkbox"/>					
EXPLANATION											
Treatment options						<input checked="" type="checkbox"/>			Verbal information		
Side effects/complications						<input checked="" type="checkbox"/>			Expressed consent		
Information leaflet						<input checked="" type="checkbox"/>			Advice to patient (recorded in patient notes)		
PRE-INJECTION											
Objective sign						<i>1. Pain in palpation (+ trauma)</i>			<i>2. Pain from Med/An</i>		
Can patient perform normal duties at work?									Yes No N/a		
Is patient able to participate in usual sporting/leisure activities?									Yes No N/a		
VAS (Pre) inj						0 1 2 3 4 5 6 7 8 9 10			<i>(8)</i>		
TECHNIQUE											
Site marked						<input checked="" type="checkbox"/>			'No touch' technique		
Hands washed						<input checked="" type="checkbox"/>			Safety aspiration		
Site Cleaned						<input checked="" type="checkbox"/>			Delivery (tick one): <i>Peppering</i> <input checked="" type="checkbox"/> <i>Bolus</i> <input type="checkbox"/>		
Bottles cleaned						<input checked="" type="checkbox"/>			Safe sharps disposal		
Adverse events (if yes - provide details on reverse AND in patient records)									Yes No		
VAS (post) inj						0 1 2 3 4 5 6 7 8 9 10					
Practitioner name:									Date:		
REVIEW											
Objective sign						<i>1. Pain palpation (+ trauma)</i>			<i>2. Pain from Med/An</i>		
Can patient now perform normal duties at work?									Yes No N/a		
Is patient now able to participate in usual sporting/leisure activities?									Yes No N/a		
VAS						0 1 2 3 4 5 6 7 8 9 10			<i>(2)</i>		
Date of review:									<i>12/2/2014</i>		

Information for Patients receiving Injection Therapy

Injections are given to relieve swelling and pain in joints and soft tissue. The injection consists of a corticosteroid that reduces the inflammation and a local anaesthetic that provides temporary numbing.

Following the injection we expect you to remain in the department for 30 minutes to ensure there are no adverse reactions although this is extremely rare. If you start to feel unwell in any way please let your practitioner know immediately.

It is important to rest the site for a couple of days and avoid strenuous activity for two weeks.

- If you are diabetic please take extra care monitoring your sugar levels for the next few days as the injection can impair your normal control.
- If you are taking the contraceptive pill then you will need to use additional methods of contraception for seven days following your injection.
- It is possible that you might experience more discomfort after this procedure and we suggest you use your usual painkillers as prescribed or instructed. If the area becomes very painful and hot then you must consult your doctor immediately.
- Women may experience some irregularity of the menstrual cycle following the injection and if a bleed occurs in a postmenopausal woman then it is recommended that she consult her doctor.

Remember it is often several days before any improvement occurs and can be up to two weeks or longer.

These are the drugs that have been used for your injection today.

Steroid Adacortyl Local Anaesthetic Lidocaine Hydrochloride

Dose 20mg Dose 2ml

Administered by: _____

If you have any concerns about any symptoms contact your practitioner during office hours, your GP or Casualty Department if urgent.

