Definition:
This protocol concerns the aspiration of synovial fluid and administration of intra-articular or soft tissue cortico-steroid injection for patients with musculoskeletal disease by registered health care practitioners working in line with patient group directions or as independent prescribers. For the purposes of this protocol, the term “healthcare practitioners” includes registered nurses, physiotherapists and podiatrists who have demonstrated competence.

DATE PROTOCOL VERIFIED: October 2006

DATE PROTOCOL REVIEW DUE: July 2010

www.bhamcrs.co.uk
email rheum.lphc@nhs.net
Rheumatology helpline 07595552782
EVIDENCE FOR PRACTICE

Patients with rheumatic disease often require joint aspiration, intra-articular injection or soft tissue injection as part of their ongoing management (Dixon A and Emery 1992). These procedures are largely undertaken only by doctors within rheumatology departments and are often needed at short notice for symptom relief. The implications of this are health professionals with the skills and competence to provide joint injections are able to provide timely care to patients. Registered nurses and allied health professionals have developed skills and competence to provide joint injections in rheumatology and the implementation of joint injection services has enhanced the patient experience (Edwards et al 2000). Registered health care practitioners who are trained to give joint injections can also provide support and training for junior doctors and other rheumatology health professionals.

Patient Group Directions (DOH Crown 1998) set out the legal framework by which health professionals working in a specific specialty can supply and administer specified medications to a particular group of patients. The patient group directions for the administration of lidocaine hydrochloride (PGD number 004/0902) and methylprednisolone acetate (PGD number 005/0902) are central to the protocol for joint aspiration and injection of cortico-steroid into the intra-articular space or soft tissues. Other drugs may be injected using this protocol but they must be prescribed by an independent prescriber prior to administration.

Audits carried out by the UHB rheumatology department demonstrate that registered health care practitioners are competent, prepared to abide by the protocol, the protocol remains relevant, the documentation is fit for practice and there is a minimal risk of infection (Homer, 2005).

INDICATIONS

Patients are referred for joint aspiration and injection of cortico-steroid into an intra-articular space or soft tissues by General Practitioners and Rheumatology Consultants. They are then assessed by the registered healthcare practitioner. They are referred for:

1. Relief of pain from inflammation in or near a joint when there are signs of synovitis, effusion, crepitus or capsulitis.

2. Plantar fasciitis

The patient must have a full clinical assessment (Appendix 3) and the opportunity to provide verbal informed consent before the procedure takes place. The patient is provided with an information leaflet (Appendix 4)
CONTRAINDICATIONS

In the following circumstances the procedure will not be performed:

1. The patient is under the age of 16
2. The patient refuses treatment. If a patient declines treatment the reasons should be documented and if their preference is for a doctor to do the injection a medical opinion should be requested or an appointment booked with the relevant doctor
3. The proposed injection site is a joint replacement/prosthesis
4. Septic arthritis is suspected
5. Infection, cellulitis or active psoriatic plaque overlying the site to be injected
6. Planned joint replacement within the next six months
7. The patient is receiving anticoagulant therapy eg. Warfarin or Heparin
8. The patient has a bleeding disorder eg. Haemophillia, Von Willebrand’s etc.
9. The patient is receiving antibiotic therapy for a current infection
10. The patient assessment suggests they may have an intra-articular fracture
11. The patient is pregnant or breastfeeding
12. The patient has a known allergy to the drugs to be injected
13. If the registered health care practitioner considers that an attempt to perform joint aspiration and injection would cause the patient unnecessary discomfort/trauma it should not be given i.e. when sepsis is suspected, in a badly deformed joint or when previous injections to the same joint have been traumatic. The patient will be referred for a medical assessment.

LIMITATIONS TO PRACTICE

If, in the registered health care practitioner’s clinical opinion, an injection is not warranted the patient will be referred for a medical assessment.

1. Resuscitation facilities must be available before the aspiration or injection takes place

Under the following circumstances advice from a doctor should be sought prior to aspiration or injection

1. Patient has had more than 5 injections to the same site in the past 12 months
2. Previously infected joint <6 months
3. Active bleeding gastric/duodenal ulcers
4. Planned dental extraction within the following 2-3 weeks
5. The patient has unstable blood sugars
6. Lack of success in previous attempts at injection in the proposed site
7. No evidence of active disease process at the site
8. Live vaccination <2 weeks
9. Unstable Angina
10. Active chickenpox, shingles or tuberculosis
CRITERIA FOR COMPETENCE

1. The registered healthcare practitioner must be a registered nurse, a physiotherapist or a podiatrist. They must have completed relevant education and training in joint aspiration and injection of corticosteroid into an intra-articular space or soft tissue, as recognised by this protocol.

2. The registered health care practitioners will have a working knowledge of and be competent in the administration of lidocaine hydrochloride and methylprednisolone acetate using PGDs or be an independent prescriber.

3. Evidence of competence must be provided and a copy kept in the registered health care practitioner’s personal file and in the health centres where the skill is practiced. A copy must also be sent to the Consultant Nurse for Rheumatology (Appendix 1).

4. Evidence of satisfactory supervised practice must be provided by the registered health care practitioner as witnessed by a practitioner who is already competent in providing joint injections (Appendix 2).

5. The number of supervised practices required will reflect the individual registered health care practitioner’s learning needs and they will undertake a final assessment with a practitioner who is already competent in providing joint injections.

6. Evidence of continuing professional development and maintenance of skill level will be required.

7. Registered health care practitioners new to The community rheumatology service, who have been performing the skill elsewhere, must familiarise themselves with this protocol. Evidence of appropriate education and competence must be provided before undertaking this expanded practice and competence will be assessed formally and informally by a practitioner competent in joint injection practicing in the service.

PROTOCOL AND SKILLS AUDIT

The Rheumatology Nurse Consultant will lead audit of the protocol. The audit will include:

- Adherence to the protocol and the patient group directions
- Any untoward incidents and adverse events arising from the aspiration or injection of joints and soft tissues by registered health care practitioners. Eg. Allergy, inoculation injury etc. All patients receiving injections by trained health professionals will be encouraged to call the rheumatology helpline with regard to post injection problems or adverse events. Records of any helpline calls pertaining to injections administered by rheumatology practitioners will be kept with the audit documentation.
• Details of those patients declining treatment and those referred for a medical assessment
• Patient satisfaction with the procedure
• Any untoward incidents and complaints

**CLINICAL INCIDENT REPORTING AND MANAGEMENT**

An incident form must be completed for any untoward incidents and near misses. A risk assessment must be completed.

A list of registered health care practitioners competent to perform this skill will be kept by the rheumatology nurse consultant.

**REFERENCES**


**BIBLIOGRAPHY**


HOBTPCT Guidelines on the management of inoculation accidents/injuries to staff

HOBTPCT *Hand Hygiene Trust Infection Control Policy Manual* 2: B 1-3 University Hospital Birmingham NHS Trust, Unpublished

HOBTPCT Handling, disposal and training in the use of sharps staff health

HOBTPCT Waste Disposal

HOBTPCT Medicines Policy
## PROTOCOL SUBMISSION DETAILS

**Protocol prepared by:**

- **Dawn Homer**   Nurse Consultant Rheumatology
- **Paresh Jobanputra**   Rheumatologist
- **Ronald Jubb**   Rheumatologist
- **Elizabeth Rankin**   Rheumatologist
- **Liz Thomas**   Pharmacist
- **Anne McGettigan**   Pharmacist
- **Louise White**   Extended Scope Physiotherapist
- **Mark Gallagher**   Podiatrist
- **Louise Denner**   Practice Development Nurse

**Education Package reviewed by:**   Dawn Homer

Protocol submitted to and approved by:

**To be reviewed by:**   Rheumatology Nurse Consultant
## END COMPETENCE: PROTOCOL FOR JOINT ASPIRATION AND ADMINISTRATION OF CORTICOSTEROID INJECTIONS

### INTO AN INTRA-ARTICULAR SPACE OR SOFT TISSUES BY REGISTERED HEALTH CARE PRACTITIONERS

**Date(s) of Education and supervised practice:** .................................................................

**Name of Registered Health Care Practitioner:** .................................................................

**Name of Supervisor:** ........................................................................................................

<table>
<thead>
<tr>
<th>Element of Competence To Be Achieved</th>
<th>Date Achieved</th>
<th>Registered Health Care Practitioner Sign</th>
<th>Supervisor Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss the relevance of clinical assessment of the patient and the evidence on which you would base your judgment for or against performing joint aspiration and injection.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss the circumstances when you would decline treating the patient and seek advice from medical staff.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss indications for joint aspiration and injection.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss potential complications of joint aspiration and injection.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss contra indications and cautions for joint aspiration and injection.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss limitations to practice as stated in the protocol.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss accountability in relation to joint aspiration and injection.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide patients with correct information, education and aftercare instructions. (Appendix 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrate accurate record keeping relating to joint aspiration and injection.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss the complications of the drug therapy as stated in the protocol.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correctly interpret and apply the Patient Group Directions for administering Lidocaine Hydrochloride 2% (PGD Number</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
004/0902) and Methylprednisolone Acetate (PGD number 005/0902).

| Demonstrate accurate and safe joint aspiration into an intra-articular space or soft tissue |
| Demonstrate correct infection control precautions throughout the procedure |
| Discuss clinical governance and risk adverse event reporting |

I declare that I have expanded my knowledge and skills and undertake to practice with accountability for my decisions and actions. I have read and understood the PROTOCOL FOR JOINT ASPIRATION AND ADMINISTRATION OF CORTICOSTEROID INJECTIONS INTO AN INTRA-ARTICULAR SPACE OR SOFT TISSUES BY REGISTERED HEALTH CARE PRACTITIONERS

| Signature of Registered Health Care Practitioner: | ……………………………………………… |
| Print name: | ……………………………………………… |
| Date: | ……………………………………………… |

I declare that I have supervised this registered healthcare practitioner and found her/him to be competent as judged by the above criteria.

| Signature of Supervisor: | ……………………………………………… Print name: ……………………………………………… |
| Date: | ……………………………………………… |

A copy of this record should be placed in the registered healthcare practitioner’s personal file, a copy must be stored in the clinical area by the line manager and a copy can be retained by the individual for their Professional Portfolio. A copy must be sent to the Consultant Nurse for Rheumatology.
COMMUNITY RHEUMATOLOGY SERVICE
EVIDENCE OF SUPERVISED PRACTICE

To become a competent practitioner, it is the responsibility of each practitioner to undertake supervised practice in order to perform JOINT ASPIRATION AND ADMINISTRATION OF CORTICOSTEROID INJECTIONS INTO AN INTRA-ARTICULAR SPACE OR SOFT TISSUES in a safe and skilled manner.

Name of registered health care practitioner: ...............................................................  

<table>
<thead>
<tr>
<th>DATE</th>
<th>DETAILS OF PROCEDURE</th>
<th>COMMENTS</th>
<th>OBSERVED BY</th>
<th>SIGNATURE AND DESIGNATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix 2
COMMUNITY RHEUMATOLOGY SERVICE

Patient Assessment Checklist for Intra-articular aspiration and injection

Date:  
Patient assessment, indications and procedure planned:  

Patient Identification Label

Procedure carried out: (state joint/s injected)

Needle size(s) used:  

Problems encountered (include allergies):

Amount of aspirate: mls

Medical opinion: (Give reasons)
Outcome:

Drs Signature:  Name:  Date:

List Drugs administered:

Drugs checked by:  Name:  Status:

Name of Injector: (Please Print)  
Signature:  

Title:  Date:
<table>
<thead>
<tr>
<th>Check for the following</th>
<th>If all listed criteria are met injection can take place</th>
<th>Action to be taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient is receiving a course of antibiotics</td>
<td>NO</td>
<td>YES: Refer to medical staff</td>
</tr>
<tr>
<td>Evidence of infection (e.g., fever, coloured sputum, infected skin, UTI etc.)</td>
<td>NO</td>
<td>YES: Refer to medical staff</td>
</tr>
<tr>
<td>Damaged/broken skin at injection site.</td>
<td>NO</td>
<td>YES: do not give injection</td>
</tr>
<tr>
<td>Joint Prosthesis in target joint.</td>
<td>NO</td>
<td>YES: do not give injection and consult medical staff</td>
</tr>
<tr>
<td>Patient has a bleeding disorder</td>
<td>NO</td>
<td>YES: do not give injection</td>
</tr>
<tr>
<td>Anticoagulation therapy (eg, Warfarin or Heparin).</td>
<td>NO</td>
<td>YES: do not give injection and consult medical staff</td>
</tr>
<tr>
<td>Live vaccination within past 2 weeks.</td>
<td>NO</td>
<td>YES: Refer to medical staff</td>
</tr>
<tr>
<td>Pregnancy or lactating.</td>
<td>NO</td>
<td>YES: Refer to medical staff</td>
</tr>
<tr>
<td>Planned procedure within next 2 weeks: i.e. endoscopy, surgery, dental treatment etc.</td>
<td>NO</td>
<td>YES: Refer to medical staff</td>
</tr>
<tr>
<td>Unstable Angina.</td>
<td>NO</td>
<td>YES: Refer to medical staff</td>
</tr>
<tr>
<td>Previous infection in target joint &lt; 6 months.</td>
<td>NO</td>
<td>YES: Refer to medical staff</td>
</tr>
<tr>
<td>Injection into target joint &lt; 3 months.</td>
<td>NO</td>
<td>YES: Refer to medical staff</td>
</tr>
<tr>
<td>Previous difficulties or allergy to injection</td>
<td>NO</td>
<td>YES: Refer to medical staff</td>
</tr>
<tr>
<td>Patient information and aftercare advice. Able to rest appropriately.</td>
<td>YES</td>
<td>NO: Inform patient why they should rest</td>
</tr>
<tr>
<td>Correct medications for injection and countersignature obtained.</td>
<td>YES</td>
<td>NO: Check drugs and administer according to appropriate patient group directions</td>
</tr>
<tr>
<td>Patient is over 16 years of age and has given their verbal consent for the procedure to go ahead.</td>
<td>YES</td>
<td>NO: Refer to medical staff</td>
</tr>
<tr>
<td>Diabetic well controlled (warn patient of effects)</td>
<td>YES/NA* delete</td>
<td>NO: Refer to medical staff</td>
</tr>
<tr>
<td>Active Bleeding gastric ulceration</td>
<td>NO</td>
<td>YES: do not give injection and consult medical staff</td>
</tr>
<tr>
<td>Active Tuberculosis</td>
<td>NO</td>
<td>YES: do not give injection and consult medical staff</td>
</tr>
<tr>
<td>Written and verbal after care instructions given</td>
<td>YES</td>
<td>No: Give written and verbal info</td>
</tr>
</tbody>
</table>
What is a Joint injection?

Cortisone (steroid) is a powerful anti-inflammatory drug. When injected into an inflamed/painful joint or area of soft tissue, it can quickly reduce inflammation and as a result in reduced pain and stiffness. It is usually injected along with some local anaesthetic.

Does it always work?

A joint injection is not always helpful. And if it does reduce the pain and stiffness we cannot predict how long it will work for. But it is often very beneficial and those benefits can last for many months in some people.

What happens?

You will be sitting or lying in a comfortable position. The site to be injected will be cleaned and may be sprayed with a freezing spray. The site is then injected.

Is it Painful?

No injection is painless. The amount of discomfort can depend on the site injected. But most people who need to have a joint injection are often pleasantly surprised and find it was much better than they expected it to be.

What about after the injection?

You may have some discomfort in the injected area for 24 – 48 hours. During this period it is advisable to rest the area injected as much as possible. We appreciate that some people with find it difficult to follow this advice. Nevertheless it is the best advice.

Are there any side effects?

All treatments and procedures have the potential for unwanted effects. However there are very few problems associated with joint or soft tissue injections. We will have discussed these with you already. However the most commonly occurring side effects are:

- Pain for a day or two at the site of the injection
- Slight thinning of the skin or a small patient of scarring over the injection site
- Alteration on blood sugar levels. If you have diabetes you will need to monitor your blood sugar more regularly for up to 48 hours after the injection. And if you are on insulin you may need to adjust your dose accordingly
• Facial flushing

Far rarer side effects include:

• Joint infection
• Joint damage
• Adverse reaction to either the steroid or local anaesthetic used

If you have concerns prior to your injection please discuss them with the clinician concerned.

If you have any concerns following the injection please contact the clinic where the injection took place during normal working hours (The contact number is at the top of this leaflet). If the joint injected becomes more hot, red or is extremely painful 72 hours after the injection was administered please contact the clinic or out of hours your GP and or Accident and Emergency Department.

Don’t forget?

✓ If you have had an injection, please do not drive home. Arrange alternative transport.

✓ It is best to rest the injected joint/area as much as possible for the next 48 hours. Then gradually return to your normal activities.

✓ You may notice some discomfort/pain around the injected area for 24 – 48 hours after the injection has been given, but this should not usually be severe. Use your usually pain killers more regularly as required. Follow the instructions on the label. If you are taking anti-inflammatory tablets these may also help.

✓ The benefits of the injection can often be felt quickly but may take several day or even weeks