The Royal Orthopaedic Hospital
Emergency Hip and Knee Arthroplasty Referrals.

The ROH is a specialist orthopaedic hospital within the West Midlands and this signpost document supports urgent Arthroplasty (hip and knee) referrals.

SUMMARY

- Patients should only be referred after the diagnosis of a surgical pathology if they are likely to be suitable for management at a stand-alone Orthopaedic unit which does not have the benefit of on-site specialist Medical services or an ITU.

- Plain radiographs are likely to be sufficient without additional imaging for referral to the Arthroplasty service.

- The referring hospital must reserve a bed and repatriate the patient if no suitable surgical pathology is subsequently identified or conservative management is advised.

- Referrals should be in a digital format with appropriate data protection compliance.

- Referrals to the ROH arthroplasty service should expect a response within 24 hours of receipt. Patients accepted for treatment should be transferred the same day if appropriate (within 24 hours) or later if the clinical situation warrants it. Some patients will be more appropriate for out-patient review rather than acute transfer.

- Referring hospitals must repatriate patients after acute intervention within 24 hours of request for repatriation.

SPECIFIC CONDITIONS

The most commonly referred conditions are described below. This is not an exhaustive list and referrals for other conditions and requests for advice will also be accepted. The management described is simply an outline and not detailed.

- Periprosthetic fractures
- Periprosthetic infections (acute or chronic) should be referred to the Bone Infection Service
- Dislocations with significant instability preventing referral as an out-patient
- Bone loss around joint replacements, impending fracture and adverse reactions to metal debris should usually be suitable for referral as an out-patient

Periprosthetic fractures/dislocations

All trauma patients need to be assessed and initially managed with a validated and locally agreed trauma protocol such as the ATLS from the time of the accident. As periprosthetic fractures frequently occur in patients with other medical conditions these need to be appropriately assessed and stabilised. Dislocations should usually be reduced expediently and the patient subsequently referred as an out-patient, but persistent instability can be referred on a more urgent basis.

Initial imaging

Any suspected periprosthetic fracture/dislocation should be confirmed with biplanar radiographs and this may be sufficient for referral without additional CT or MRI scanning.

Minimal clinical information for referral

- Mechanism of injury
- Injuries sustained and primary and secondary survey summary.
- Neurological status of the relevant limb and soft tissue condition.
- Previous arthroplasty history with details of implants where possible, including adjacent joints.
- PMH and medication (specifically anti-coagulation)/allergies
- Ongoing medical treatment
- Transfer images on an emergent basis
- Contact details of referrer / on-call team

Periprosthetic infection

Referrals for periprosthetic infection should be referred to the Bone Infection Service at the ROH.

The following principles apply but please see the Bone Infection Service's guidelines.

All patients need to be assessed and initially managed with consideration of identifying a potential source of sepsis (skin infection, urinary tract infection, dental infection, septicaemia).

As periprosthetic infections frequently occur in patients with other medical conditions or immuno-compromised patients any associated medical conditions need to be appropriately assessed and stabilised.

Initial assessment

A general assessment is required for a source of sepsis and to recognise a critically ill patient.

- If the patient is septic, the patient should be resuscitated appropriately and blood cultures taken. Empirical antibiotics should be commenced with advice from local microbiological

guidance. Septic patients are not usually suitable for acute transfer to the ROH, and may require urgent surgery at the referring unit

- For patients who are not septic or do not have neurological compromise, microbiological samples and sensitivities should be obtained before starting antibiotics.

FBC, ESR, CRP, renal function (AKI is common), LFTS (check for low albumin), MSU and blood cultures should be taken.

Initial imaging

Any suspected infection should be investigated with plain radiographs. Additional scanning (US/S, CT or MRI may be appropriate) and aspiration should be considered. Antibiotics should be withheld unless required for the management of sepsis.

Referral

- The patient can be referred to the ROH Bone Infection Service once imaging/initial investigation results are available and medical assessment and stabilisation is complete.

- Not all patients require transfer. Advice for initial management and follow-up may be more appropriate.

Minimal clinical information for referral

- Onset and duration of symptoms
- General patient status and comorbidities
- Source of infection (if known or suspected)
- Previous arthroplasty history with details of implants in-situ if previous surgery has taken place at the referring hospital
- PMH and medication/allergies
- Current ESR/CRP
- Microbiological results
- Transfer images on an emergent basis

Referrer obligations

The referring unit must ensure that:

1. The patient is reviewed and referred by registrar grade or above and discussed with the supervising consultant.
2. The patient has been appropriately assessed and resuscitated from a general medical point of view.
3. The patient has been physiologically assessed for suitability of transfer and potential surgery.
4. All appropriate initial imaging has been completed.

5. All imaging has been digitally transferred to the appropriate emergency portal as directed by the ROH arthroplasty service.
6. The referral is in a written format ideally in a digital form. Any referrals requiring immediate attention are flagged as such and followed up by a phone call.
7. The initial management plans outlined by the accepting arthroplasty service are carried out.
8. Any agreed transfer takes place rapidly and after ensuring the patient is fit for transfer.
9. They agree to repatriate the patient when acute is complete. Repatriation should occur within 24 hours of request and failure to repatriate should be escalated through to senior management.

Receiving Arthroplasty unit obligations

The arthroplasty service receiving the referral must ensure that:

1. They provide a clear and available contact point for referrers.
2. Any referral received must have been reviewed by registrar grade or above and discussed with the supervising consultant.
3. Any digital or verbal referral is reviewed and an initial response given in less than 24 hours from receipt of referral.
4. There is a clear written protocol for urgent image transfer available to the referring service that allows the receiving clinical team to access images on an emergent basis to facilitate expedient provision of advice.
5. Clear advice is given outlining recommended action plan including plans for medication, mobility status, orthotics, further imaging and transfer plans. The advice should be written and ideally in a digital format that the referring hospitals can access.
6. Any agreed transfer takes place expediently and on the agreed day. The referring hospital must be updated if transfer does not happen on the agreed day. Failure to transfer should be escalated through senior management.
7. Any patient ready for transfer must be assessed and documented as fit for transfer.
8. On repatriation or discharge, a written discharge summary must be provided to the referring service with a clear outline of management undertaken, orthotic advice (if appropriate), wound management (if appropriate) and a rehabilitation prescription. Clear follow up instructions should be given.
9. All postoperative imaging is provided to the referring centre.
10. There is continued access for advice as required.

FINALLY

This document outlines the expected initial management and referral pathway for common complex arthroplasty conditions. It is not exhaustive and the Arthroplasty service at the ROH are happy to accept calls for advice for conditions not described in this document.

The document is a guideline and reflects the situation at the time of writing.

Emergency image transfer protocols

Please ensure that you have sent any images via the Image Exchange Portal (IEP) to The ROH.