

Freedom of Information Act 2000**The Royal Cornwall Hospitals NHS Trust Response to Information request****Date Request Received: 09 February 2024****FOI Ref No: 23562****Requested Information:**

Questions for clinical team(s):

1. In 2022/2023 (or for the last recorded year with data available), in your Trust/Health Board, how many of the following did you record?
 - a) Paediatric patients with suspected septic arthritis in native joints
 - b) Paediatric patients with suspected prosthetic joint infection (PJI)
 - c) Adult patients with suspected septic arthritis in native joints
 - d) Adult patients with suspected prosthetic joint infection (PJI)

2. Does your Trust/Health Board follow or have any locally developed/adapted guidelines for the diagnosis and treatment of septic arthritis in native joints and prosthetic joint infections in both adults and paediatric patients?
 - a) If yes, please state which guidelines have been adapted and please provide a copy of your local guidelines

3. When investigating suspected septic arthritis in native joints in both paediatric and adult patients, is a synovial fluid sample collected before or after antibiotics are administered and commenced?
 - a) Is joint aspirate collected in ED/triage, Assessment unit, inpatient ward, or theatre?
 - b) Who typically performs the procedure and collects the sample? (Please specify job role)
 - c) Does the above differ for suspected prosthetic joint infections? If yes, please clarify how this differs

4. What clinician would typically manage paediatric patients with suspected septic arthritis in native joints? (please select one or multiple)
 - I. Paediatric Consultant
 - II. Orthopaedic Consultant
 - III. Infectious Diseases Consultant
 - IV. Other (please specify)

5. Are patients discharged before culture results from synovial fluid aspirate are received? If yes, what requirements need to be met before patients are discharged?

Questions for lab/diagnostic team(s):

6. For adult and paediatric patients with suspected septic arthritis of native joints, what are the mean turnaround times (in hours, or if more appropriate, working days) for results on the following tests from receipt of specimen: (please provide an answer for each result)

- a) Gram Stain
- b) Culture
- c) Blood culture
- d) White blood cell count

7. Does your Trust/Health Board conduct PCR testing of bacteria from synovial fluid of patients who have suspected septic arthritis of native joints?

If yes:

- a) Is this testing conducted on site?
- b) At what point is testing requested – when the culture is negative or on request?
- c) How long is the average turnaround time for results from receipt of specimen?
- d) What organisms are routinely tested for?

8. Does your Trust/Health Board conduct 16S PCR testing of bacteria from synovial fluid of patients who have suspected septic arthritis of native joints?

If yes:

- a) Is this testing conducted on site?
- b) At what point is testing requested – when the culture is negative or on request?
- c) How long is the average turnaround time for results from receipt of specimen?
- d) What organisms are routinely tested for?

Joint question – input from both clinician and lab/diagnostic team:

9. For joint infections, in your Trust/Health Board, please confirm the following:

- a) Which roles or stakeholders are involved in the design of diagnostic pathways and introducing change/pathway improvement?
- b) Which team(s) hold the budget for investing and implementing in new technologies across the pathway (e.g. rapid diagnostic testing)?

Response:

- 1) Where RCHT inpatients had a spell end date between 01/04/2022 and 31/03/2023 (inclusive).
Where patients had a coded diagnosis (in any position) relating to 'septic arthritis' or 'prosthetic joint infection' (please see separate 'Diagnosis Codes' below for breakdown).
The codes are the same for both adults and paediatrics.
Please note, we do not code patients with 'suspected' conditions, the data below contains patients who have the requested conditions confirmed or treated as.
We have split adult and paediatric by 'age on admission': Paediatric = 17 years and under. Adult = 18 years and over.
Please note, the below figures show the total number of patients i.e. For patients with multiple spells relating to the above diagnoses, only one record will show.
Diagnosis Codes:
 - Septic Arthritis = M00.0, M00.1, M00.2, M00.8, M00.9, M46.5
 - Prosthetic Joint Infection = T84.5
 - a. 6
 - b. 0
 - c. 44
 - d. 47
- 2) Yes – On intranet micro guide with references but all cases are discussed in micro and ED MD
- 3)
 - a) This depends on the joint involved.
 - b) Again, this depends on the joint involved.
 - c) Yes, they are always undertaken in theatre by an orthopaedically trained operator.
- 4)
 - i. and ii. - joint care with paed and orth consultant and also with discussion with microbiologists.
 - IV - other
- 5) Yes, need the microscopy result, the patient to be medically fit for discharge and a follow up plan in place.
- 6) TAT
 - a) 53mins,
 - b) 48 hours for standard culture,
 - c) Depends on result – negative would be interim in 2 days final result 5 days,
 - d) as a),
- 7) No
- 8) Yes - testing of 16S PCR for bacterial DNA is requested following clinical discussion. Not done on site. Pan-Bacterial PCR. TAT is 4 days after request is made from our laboratory
- 9) New technology would require a business case involving relevant laboratory and clinical stakeholders which would be submitted to the appropriate care

group/s in the first instance for approval. If it was cost neutral it may be introduced as a quality improvement.

Attachment(s):

None

Date Response sent:

26 April 2024