UK Standards for Microbiology Investigations

Review of users’ comments received by Working group for microbiology standards in clinical bacteriology

B 20 Investigation of intravascular cannulae and associated specimens

Recommendations are listed as ACCEPT/ PARTIAL ACCEPT/ DEFER/ NONE or PENDING
Consultation: 05/05/2015 – 02/06/2015
Version of document consulted on: B 20dp+

Proposal for changes

<table>
<thead>
<tr>
<th>Comment number</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date received</td>
<td>19/05/2015</td>
</tr>
<tr>
<td>Lab name</td>
<td>Oxford University Hospital NHS Trust Microbiology</td>
</tr>
</tbody>
</table>

**Section**

**Comment**

Consideration should be given to triage peripheral IV line tips in the following way. When IV line tips are received in the laboratory they are processed if there is a positive blood culture in the 7 days before or after the day the line tip is sent. If there is no positive blood culture the tip is refrigerated for 7 days and only cultured, if a blood culture becomes positive. This has been shown in a randomised study to reduce antibiotic use in ITU with no impact on morbidity, mortality or length of stay, see A. Perez-Parra et al Journal of Hospital Infection 77 (2011) 309-315. This policy has been shown to be acceptable and cost saving in the NHS, see Colston J et al. 2013 J Hosp Infect. May; 84(1):77-80.

**Evidence**


**Health benefits**

A triage policy could save the NHS a large amount of money by reducing antibiotic use and reducing laboratory costs with improve quality of care for patients - see papers above.

**Recommended action**

ACCEPT

This has been updated accordingly.

<table>
<thead>
<tr>
<th>Comment number</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date received</td>
<td>22/05/2015</td>
</tr>
<tr>
<td>Lab name</td>
<td>Salford Royal NHSFT</td>
</tr>
<tr>
<td>Section</td>
<td>4.1 &amp; appendix</td>
</tr>
</tbody>
</table>

**Comment**

a. 4.1: the second sentence commencing 'definitive diagnosis........' Refers to diagnosis of CR-BSI and needs amending to include both positive cannula and
blood cultures.

b. Appendix. Two of the boxes refer to 'coagulase negative staphylococcus aureus'. These need amending to coagulase negative staphylococci (no italics). Otherwise this all looks good to me.

| Recommended action | a. ACCEPT
This section has been amended to include both cannulae and blood cultures
b. ACCEPT
The appendix has been amended to reflect the changes mentioned. |

| Comment number | 3 |
| Date received | 22/05/2015 |
| Lab name | Truro |
| Section | Pgs 11, 14, 15, 19 |
| Comment | a. Pg 11 - last paragraph, 1st line - should read MALDI
b. Pg 14 – 1st line, immersed in sterile enrichment broth - No information regarding quantifying enrichment broth culture - how is this performed and related to infection?
c. Pg 15 4.5.1 table - Standard media states blood agar for cannula-related bacteraemia/infection - ?broth
d. Pg 19 2nd box down on the left - Blood agar incubated.... - What happened to the broth? |
| Recommended action | a. ACCEPT
This has been updated accordingly.
b. ACCEPT
This section has been updated with appropriate information. The reason as to why the enrichment broth is not recommended for use in this document is mentioned under section 4.1 subheading – Enrichment method.
c. NONE
This document does not recommend the use of the enrichment broth for culture except in instances when a candida infection is under investigation.
d. NONE
Not recommended in this document. |
a. Introduction
   i. The third paragraph makes reference to the EPIC guidelines in relation to prevention of HCAIs associated with use of central venous catheters. It is suggested that reference (2) is superseded by the updated version of these guidelines which is EPIC3 published in Dec 2013. H.P. Loveday et al. Journal of Hospital Infection 86S1 (2014) S1-S70
   ii. Also in the third paragraph CR-BSI is briefly discussed. It might be useful to reference this to the Matching Michigan project 'Matching Michigan': a 2-year stepped interventional programme to minimise central venous catheter-blood stream infections in intensive care units in England. BMJ Qual Saf doi:10.1136/bmjqs-2012-001325

b. Specimen Transport and Storage
   The text specifies that ‘Specimens should be transported and received in the lab within one working day of collection and processed as soon as possible. Requirements of individual testing labs should be referred to reference 45’. Reference 45 depicts DH prevention and treatment of tuberculosis. Is this a correct citation for the IV cannulae SMI?

c. Specimen processing /procedure
   Semi-quantitative method
   Page 14, second paragraph, reference 48 dates back to 1977. It is queried whether it is appropriate to quote a reference which is nearly 40yrs old in relation to the measuring criteria to determine if resultant growth is clinically significant ie > 15 CFUs.
   In addition, there doesn’t appear to be a reference for the suggestion of a higher threshold ie >100 CFUs.

d. General comment
   It has been noted that some laboratories receive additional samples which are treated in a very similar way to IV cannulae. For example pacing wires undergo enrichment culture similar to that described in Section 4 Specimen Processing/Procedure. Skin swabs from the entry site of drivelines associated with Ventricular Assist Devices are processed in the same way as swabs from IV access sites. Should these sample types be listed in the introduction or are they covered in other SMIs?

Recommended action

<table>
<thead>
<tr>
<th>a.</th>
<th>i) ACCEPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>This has been updated accordingly.</td>
<td></td>
</tr>
<tr>
<td>ii) ACCEPT</td>
<td></td>
</tr>
<tr>
<td>This has been updated accordingly.</td>
<td></td>
</tr>
</tbody>
</table>
b. **ACCEPT**
   This has been updated accordingly.

c. i) **NONE**
   The reference by MAKI et al 1977 although quite old, this is the original paper that describes semi-quantitative culture method and all the recent journals refer to this hence the reason why it was used.

   ii) **ACCEPT**
   This has been updated accordingly with a reference added to this section.

d. **NONE**
   Information on the exclusion of pacing wires has been added into the scope of document to make it clear.

Respondents indicating they were happy with the contents of the document

<table>
<thead>
<tr>
<th>Overall number of comments: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date received</td>
</tr>
<tr>
<td>Date received</td>
</tr>
<tr>
<td>Date received</td>
</tr>
</tbody>
</table>