BRONCHIAL BRUSH SPECIMENS

I. Introduction

Protected brush specimens are obtained free of oral contamination. However, some studies have shown that quantitative cultures are necessary to distinguish pathogens from nonpathogens. These studies have demonstrated that colony counts of >1 x 10^6/L (>100/ml) i.e. growing more than 10 colonies on a plate streaked with a 0.01 ml loop may be significant.

II. Specimen Collection and Transport

See Pre-analytical Procedure - Specimen Collection QPCMI02001

III. Reagents / Materials / Media

See Analytical Process - Bacteriology Reagents_Materials_Media List QPCMI10001

IV. Procedure

A. Processing of Specimens

See Specimen Processing Procedure QPCMI06003

a) Direct Examination: Not indicated.

b) Culture:

<table>
<thead>
<tr>
<th>Media</th>
<th>Incubation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Agar (BA)</td>
<td>CO₂, 35°C x 48 hours</td>
</tr>
<tr>
<td>Haemophilias Isolation Medium (HI)</td>
<td>CO₂, 35°C x 48 hours</td>
</tr>
<tr>
<td>MacConkey Agar (MAC)</td>
<td>CO₂, 35°C x 48 hours</td>
</tr>
</tbody>
</table>

If *B. cepacia* is required or specimen is from a patient with Cystic Fibrosis, add:

Of Base, Colistin, Bacitracin & Lactose Agar (OCBL) O₂, 35°C x 5 day
Keep the BA, HI and MAC plates CO₂, 35°C x 5 days
B. Interpretation of cultures:

Examine BA, HI and MAC after 24 and 48 hours incubation. Examine OCBL daily for 5 days. Identify with quantitation growth of any potential pathogens, including yeast.

V. Reporting

If the brush is received in <1 mL of fluid, report in the “Test Comment” field of the LIS as “Brush received in wrong volume of fluid”.

If a dry brush is received, report in the “Test Comment” field of the LIS as “Dry brush received”.

Issue a preliminary report after 18-24 hours incubation.

Negative Report: “No growth”

“No B. cepacia isolated” if B. cepacia culture is requested.

Positive Report: Note: Do not quantitate isolates on brushes received dry or in wrong volume of fluid.

Report all isolates quantitatively: <1 x 10^6/L if <10 colonies

>1 x 10^6/L if ≥10 colonies

All potential pathogens in any number with appropriate susceptibilities.

>1 x 10^6/L or <1 x 10^6/L Commensal flora, including (list all organisms).”

VI. References
