

PROTOCOL FOR MICROBIOLOGY CORNEAL SCRAPES

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Approving body	Directorate Governance Group
Policy reference	BMEC/Ophth/041

Overall purpose of the guideline

Standard procedure for use in the BMEC for performing corneal scrapes for microbiology

Principle target audience

BMEC clinicians who are qualified to perform corneal scrapes

Application

The guideline applies to all patients

Scope

The area of practice applies to all patients

National Guidance incorporated

No national guideline has been used

DOCUMENT CONTROL AND HISTORY

Version No	Date Approved	Date of implementation	Next Review Date	Reason for change (e.g. full rewrite, amendment to reflect new legislation, updated flowchart, etc.)
1	March 2013	March 2013	December 2016	Full review
2	July 2018	July 2018	July 2021	Full Review

Protocol for Microbiology Corneal Scrapes

Microbiology is a science where the quality of results is directly related to the quality of the specimen received. Effective results will require a well taken specimen reaching the lab quickly.

- Urgent specimens: A specimen is 'urgent' only when the result of the smear actually influences patient management. Microbial keratitis is an ophthalmic emergency as it has the potential to impair vision within 4-8 hours. All cases of corneal abscess need an urgent corneal scrape.
If a specimen is to be examined 'urgently' - it must be assumed that the requesting clinician will be available to act on the result. A contact number must be supplied with the specimen.
- An urgent specimen must be transferred to Pathology immediately after it is taken.
- Non urgent specimens must also be transferred to Pathology where the agar plates will be incubated immediately on arrival, for next day reporting.
- Plates will be incubated for 48 hrs unless prolonged incubation is specifically requested.

Perform corneal scrape using BMEC standard procedure

Identify the following:

Swabs

Virology / Chlamydia transport media

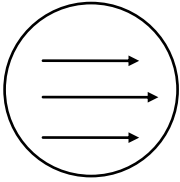
Number 15 scalpel blades

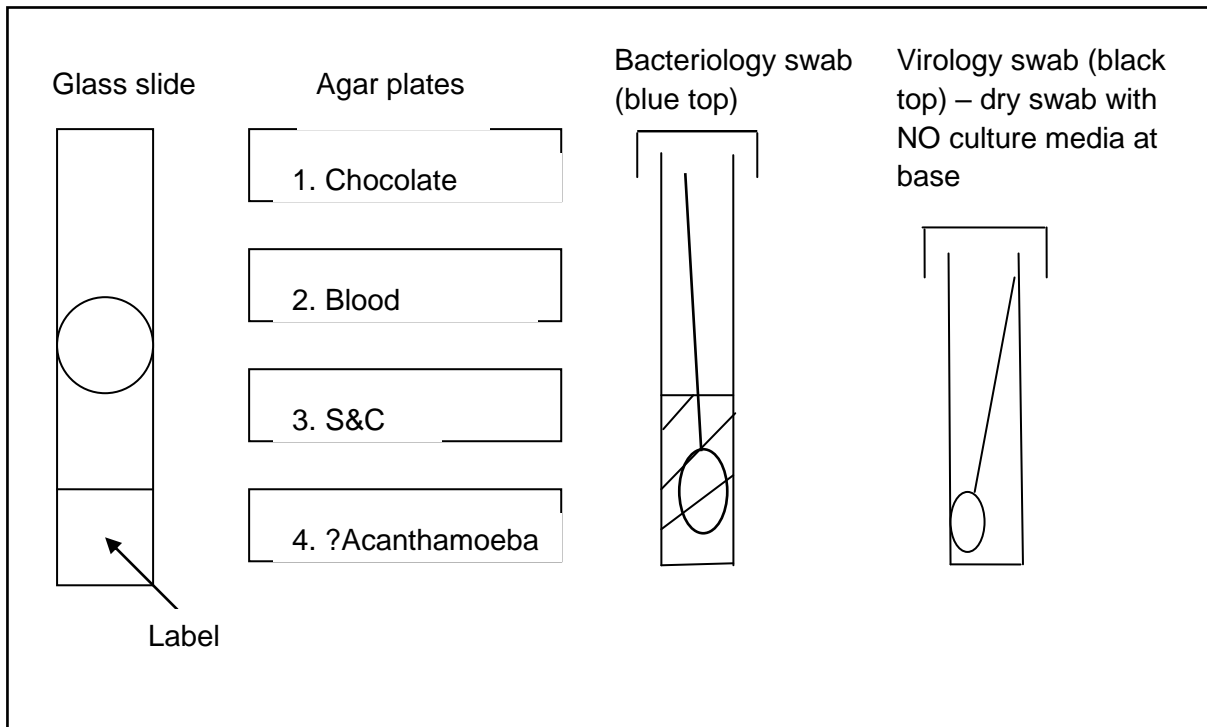
Glass slide

Pencil and marker pen

Transport box

Agar plates: labelled 1- 3 also Acanthamoeba plate if indicated (2% agar)

1. Take swabs as appropriate
2. With scalpel blade, perform corneal scrape from the edge and base of the ulcer. Using the material obtained, inoculate agar plates in the sequential order indicated below (chocolate agar, blood agar and Sabouraud's agar) by gently streaking the agar with the blade (do not break the surface of the agar plates). Use a fresh blade for each plate.A diagram of a circular agar plate. Inside the circle, there are three horizontal lines representing streaks, each with an arrowhead pointing to the right. The streaks are parallel and spaced evenly across the width of the circle.
3. With a fresh blade take a further corneal scrape and smear evenly over the glass slide within the marked circle.
4. Discard sharps safely. See [POLICY FOR THE MANAGEMENT OF HEALTHCARE WASTE AND SHARPS](#) (insert hyperlink to SWBH/Org/038)
5. Label slide (using pencil) on frosted area; all swabs and plates (using marker pen or documentation label) with patients name and unit number.



6. If Acanthamoeba is suspected send a corneal scrape on Acanthamoeba plate (as above) to microbiology. These are not urgent specimens and should only be done during the working day
7. Place all 3 (or 4) plates, slide and virus transport medium into the transport box.
8. Complete request form clearly and fully:

NB. minimum data set.....

Date

Patient Name and DOB

Patient Unit No

Patient location

Consultant

Requesting clinician Phone / Mobile No

Any special requests i.e. Nocardia etc

Specimen type/site

Clinical details

Place all swabs into the plastic bag attached to request form. **Please do not put swabs into the transport box.** If the patient wears contact lenses, send the contact lens, lens case and solutions with the swabs.

Ensure that transport box, request form and swabs are transferred to Pathology.

- Procedure for transfer to Pathology

Please note that it is the responsibility of the requesting clinician to ensure a specimen reaches the laboratory.

- Urgent Specimens

08.00 to 17.00 hrs

- Nurse calls porter to transfer transport box and swabs to Pathology
- Clinician notifies microbiology laboratory on Ext 4261/2
- Clearly label the request form urgent and include bleep/ contact number.

17.00 to 08.00 hrs (out of hours / on call)

- Nurse calls porter to transfer transport box and swabs to Pathology (blood bank)
- Clinician contacts 'on call' MLSO via switchboard
- Clearly label the request form urgent and include bleep contact number

Whatever the time... WAIT on site for the result to be telephoned to you.

You should not need to wait more than 1 hour (if appropriate to the clinical care of the patient)

- Non Urgent Specimens

08.00 to 12.00

- Non urgent specimens taken during the morning (weekdays) must be stored at room temperature in the transport box until sent to pathology to reduce the risk of killing fragile organisms.
- All specimens will be taken from the A & E fridge to Pathology by the duty phlebotomist.

12.00 to 17.00

- Nurse calls porter to transfer transport box and swabs to Pathology

17.00 to 08.00

- Nurse calls porter to transfer transport box and swabs to blood bank.

The box will be incubated so (please) swabs must be kept separate.

Note: For selected cases of atypical keratitis (viral, acanthamoeba, fungal) when a polymerase chain reaction test may be indicated, discuss with the corneal team