Clinical Skills

Taking nose, throat and skin swabs

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Aims and Objectives

The aim of this module is to facilitate learning regarding the purpose and procedure of taking nose, throat and skin swabs.

The learning outcomes are for the student to be able to:

- Appreciate why a patient may need a swab taken.
- Describe the need for care in handling swabs and the potential for infection hazard.
- Appreciate the need for care in labeling swabs and completing request forms.
- Outline the process of taking swabs from the nose, throat and skin, and demonstrate how to take a swab on a simulation manikin.
‘Sterile swabs are commonly used in clinical practice to obtain samples of material from skin and mucous membranes. They are utilized to identify micro-organisms in suspected infection or as part of a screening programme to identify patients who may be carrying pathogens without displaying clinical signs or symptoms. The overall aim is to identify the causative organism and determine the most effective therapy’ (Dougherty and Lister 2011)

Obtaining a swab is an easy method of collecting material from skin or mucous membrane for microbiological analysis. This material can be collected from any accessible area of the body using a commercially prepared sterile swab tipped with cotton wool or a synthetic material (rather like a long cotton bud).

This module will describe obtaining swabs from the nose, throat and skin using an aseptic technique.

Swabs can also be obtained from the ear, eye, genital organs, rectum or a wound. These will not be covered in this module and if asked to obtain these swabs a student should have been appropriately prepared, however similar principles would apply.
A correct aseptic swabbing technique is required in order to collect an adequate sample of material which is representative of the infection and pathogenic changes present.

A correct technique will also ensure that the swab is not contaminated from surrounding tissues. For example a throat swab will not be contaminated by commensal organisms in the mouth.

Swabs are used to test for bacterial and viral infections. You should know which test you require and use the appropriate swab and request form according to local policy. Most swabs will be for bacterial infections.
Taking a swab is indicated:-

• If there are clinical signs of infection, e.g. pain, inflammation, heat, pus etc.
• If a patient shows signs of a systemic infection or has a pyrexia whose origin is not known.
• As part of a screening programme (e.g. for MRSA) (See guidance notes on MRSA screening, or type http://bit.ly/1b461z5 into your browser)

Taking a swab is NOT indicated:-

• As routine use.
• On chronic wounds which will be colonized with skin flora.
Equipment required

Essential for every swab taken

- Apron
- Gloves
- Swab (commercially prepared packet containing sterile swab and tube of medium for transport).
- Request form

Optional depending on swab to be taken

- Sterile saline to moisten swab if area to be swabbed is dry, e.g. nose and skin.
- Tongue depressor to enable visualization of throat when taking throat swab.
Procedure - Consent

Explain the procedure to the patient, including the reason for taking a swab and any discomfort they may experience.
Put on an apron and wash your hands.
Procedure - Equipment

Assemble equipment. Take equipment to patient in suitable container, e.g. clean kidney dish.

Place on clean stable surface.
Procedure – Positioning the Patient

The patient will need to be in an appropriate position for the swab to be obtained.

**Nose** – the patient will need to tilt their head backward

**Throat** – the patient will need to sit upright facing a strong light, tilt their head backwards, open their mouth and stick their tongue out.

**Skin** – the part of the skin to be swabbed needs to be exposed.

Assist the patient to adopt an appropriate position if necessary. (N.B. use principles of good manual handling and an assistant if required.)
Procedure – Gloving Up

Put gloves on

This is to reduce the risk of cross-infection and specimen contamination.

This will also protect you from infection.
Procedure – Opening the Pack

Open the outer packaging of the swab far enough so that you are able to remove the swab, remove the top of the transport medium container and insert the used swab without contaminating any of these objects.

This will preserve its sterility and prevent contamination from surroundings while in use.

With the swab shown this means tearing down about one third of its length.
Procedure – Taking the Swab

Remove the top of the transport medium container.

Take the swab appropriately for the type required (see next 3 slides)

Insert the used swab in the transport medium ensuring it has securely clicked into place. It must not come apart again during transport.
Procedure – Nose Swab

The patient needs to tilt their head backwards so that you have a clear view of their nostrils.
Moisten the swab with normal saline before use to prevent discomfort for the patient.
Insert the swab inside the anterior nares with the tip directed upwards and gently rotate it.
Repeat with the other nostril.
Procedure – Throat Swab

The patient needs to sit upright facing a strong light, their head tilted backwards, mouth open and sticking their tongue out. This will enable you to see the throat and mouth easily and therefore take a swab from the throat and not contaminate it in the mouth when inserting and removing it.
Procedure – Throat Swab

The patient may gag during the procedure so depress the tongue gently with the tongue depressor to prevent it from contaminating the swab when being removed.

Also to enable the patient to relax at this time, ask them to say ‘ah’.

Quickly but GENTLY roll the swab over any area of exudate or inflammation or over the tonsils and posterior pharynx.

Carefully remove the swab. Avoid touching other areas of the mouth while doing so.
Procedure – Skin Swab

If area to be swabbed is dry moisten the swab with sterile saline. This is because organisms adhere better to a moist swab than a dry swab.

Roll swab along area of skin to be swabbed.
Procedure – Patient Comfort

Ensure the patient is comfortable.

Provide tissues to dry skin or nose.

Advise them to return head to a normal attitude.

If they have had to move more than their head for the procedure assist them as necessary to return to their previous position.
Procedure – Tidying Up

Remove gloves and apron and dispose of all rubbish correctly (Gloves, tongue depressor and apron in a tiger bag, and all other normal waste in domestic black bag).

Wash your hands.

This is to reduce the risk of cross infection and infection to yourself.
Procedure - Documentation

Label the swab container. To ensure you have the correct details this should be done in the presence of the patient checking their name, address and date of birth with them.

Complete the request form. Ensure this completely matches the details on the swab container and is specific about from where the swab has been taken; the clinical details such as the patient’s symptoms or the indication for taking the swab; and what investigations in particular are required.

Record the details of when and from where the swab has been taken in the patient’s notes. This will enable follow up of the swab result as well as being a legal requirement of patient care.
Procedure – Sending the sample to the Laboratory

Send the swab to the laboratory as promptly as possible. This will increase the chance of accurate identification of responsible organisms and thus correct treatment of the patient.
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Checklist (1 of 2)

- Explain the procedure to the patient and seek consent.
- Put on apron.
- Wash hands.
- Assemble equipment.
- Take equipment to patient.
- Advise the patient to assume appropriate position. Assist if necessary.
- Put on gloves.
- Open swab packet as far as will enable removing the swab without contaminating it.
- Remove top from transport container.
- Take swab appropriately for type to be obtained.
- Put swab in transport container, ensure securely placed.
- Ensure patient comfortable.
- Remove gloves and apron.
- Dispose of rubbish.
- Wash hands.
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Checklist (2 of 2)

- Label swab container.
- Complete request form.
- Send swab and form to laboratory.
- Document in notes.
References