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INTEGRATED PATHOLOGY SERVICE
MICROBIOLOGY DOCUMENT
WEST SUSSEX

Pathology User Manual Microbiology Investigations General Specimens (Swabs, Pus and miscellaneous items)

[PD-MIC-UMSwabsPus]

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Swabs and Pus

Forms may be signed by a member of the nursing staff with the agreement of the Consultant / GP in charge of the patient's care.

Swab and Specimen Types

General Bacteriology

Please use black-topped swabs with black (charcoal) transport medium

Pus, tissue or miscellaneous items for culture may be sent in a sterile plastic container with no additives.

Virology

Please use green-topped (Virocult) swabs.

Chlamydia / GC NAATs

Please use either the HOLOGIC® APTIMA® Vaginal Swab Specimen Collection Kit for vaginal site or the Unisex Swab Specimen Collection Kit for Endocervical site. Male patients should submit a urine sample collected using the designated HOLOGIC® APTIMA® urine collection device (yellow-labelled) ensuring the container is filled with the correct volume of urine (between the two black indicator lines)

Pertussis

A specially designed blue-topped per-nasal swab is available.

Specimen Collection Techniques

Pus / Wound swab

Collect swabs into the appropriate transport medium and transport to the laboratory in sealed plastic bags.

Collect specimens before starting antimicrobial therapy where possible.

Samples of pus/exudate, if present, are preferred to swabs. If only a minute amount of pus or exudate is available it is preferable to send a pus/exudate swab in transport medium to minimise the risk of desiccation during transport

Sample a representative part of the lesion. Swabbing dry crusted areas is unlikely to yield the causative pathogen. If specimens are taken from ulcers, the debris on the ulcer should be removed and the ulcer should be cleaned with saline.

Specimens should be transported and processed as soon as possible

Nose swab

Collect swabs into the appropriate transport medium and transport to the laboratory in sealed plastic bags.

Collect specimens before starting antimicrobial therapy where possible.

Moisten swab in sterile saline / distilled water. Direct the swab upwards into the anterior nares and gently rotate.

Specimens should be transported and processed as soon as possible

Throat swab

Collect swabs into the appropriate transport medium and transport to the laboratory in sealed plastic bags.

Collect specimens before starting antimicrobial therapy where possible.

Throat swabs should be taken from the tonsillar area and/or posterior pharynx, avoiding the tongue and uvula. Throat swabs should not be taken if the epiglottis is inflamed as sampling may cause serious respiratory obstruction.

Specimens should be transported and processed as soon as possible

Pernasal swab

Collect swabs into the appropriate transport medium and transport to the laboratory in sealed plastic bags.

Collect specimens before starting antimicrobial therapy where possible.

Use the small, flexible swabs supplied by the laboratory. An assistant should hold the child's head still. Pass the small, flexible swab directly backwards into the nasopharynx. Allow the child to cough then remove the swab.

Specimens should be transported and processed as soon as possible.

Cough swab

Cystic fibrosis (CF) screen culture
A cough swab should only be used if a patient cannot expectorate.

Use charcoal transport swab
Hold the swab as far back in the throat as possible while the patient coughs
Place swab into transport medium and transport to the laboratory in sealed plastic bags.
Transport without delay, if transport is delayed store at ambient temperature

Eye swab

Collect swabs into the appropriate transport medium and transport to the laboratory in sealed plastic bags.

Collect specimens before starting antimicrobial therapy where possible.

For child with a sticky eye(s), swab the exudate. Otherwise (including Chlamydia), conjunctival scrapings are preferred (use swab to scrape).

Specimens should be transported and processed as soon as possible

Ear swab

Collect swabs into the appropriate transport medium and transport to the laboratory in sealed plastic bags.

Collect specimens before starting antimicrobial therapy where possible

Insert swab tip into the ear, rotating gently against walls. Swab any pus or exudates

Specimens should be transported and processed as soon as possible

Genital swab

Vaginal discharge / vaginosis – High vaginal swab

Collect swabs into the appropriate transport medium and transport to the laboratory in sealed plastic bags.

Collect specimens before starting antimicrobial therapy where possible

Cervical and high vaginal swabs should be taken with the aid of a speculum. It is important to avoid vulval contamination of the swab. For *Trichomonas*, the posterior fornix, including any obvious candidal plaques should be swabbed. If pelvic infection, including gonorrhoea, is suspected, the cervical os should be swabbed.

Specimens should be transported and processed as soon as possible

Sexually transmitted diseases

Female – Endocervical, urethral, rectal, ± HVS, pharyngeal. (endocervical/vaginal in Aptima device → Chlamydia/GC NAATs)

Male – Urethral, pharyngeal, rectal (Urine in Aptima device →Chlamydia/GC)

Collect swabs into the appropriate transport medium and transport to the laboratory in sealed plastic bags.

Collect specimens before starting antimicrobial therapy where possible

Specimens should be transported and processed as soon as possible

Neonatal screen

At delivery (following maternal pyrexia). Deep ear swab plus gastric aspirate.

Babies admitted to SCBU from other hospitals. ET aspirate (if intubated), NP aspirate (if not) and urine

Limitations of examination procedure

- Appropriate specimens are often difficult to obtain and incorrect or sub-optimal specimens are often received. Correct specimen collection is important to ensure the optimal yield of any pathogen present.

- It is possible that certain strains of microorganism being sought are sensitive to the agents used in selective culture media, which may result in the failure to isolate these strains. Usually however, non-selective and selective culture media are used in parallel.

- The laboratory uses direct microscopy for the detection of *Trichomonas vaginalis* – this method may be less sensitive than culture.