

PAEDIATRIC NURSING PRACTICE MANUAL
SECTION 5

SPECIMEN COLLECTION

5.5 WOUND SWAB

5.5.1 COLLECTION OF WOUND SWAB

Aims

1. To collect wound exudate for microscopy and culture without contamination.
2. To enable identification of organism(s) causing infection.
3. To enable the identification of an antibiotic sensitivity pattern to guide appropriate treatment.
4. To enable the identification of potentially invasive pathogenic organisms in susceptible wounds eg. burns.

Key Points

1. This is a clean [aseptic technique](#).
2. Chlamydial wound swabs are rarely requested. If required refer to PathWest Pathology Handbook or contact the relevant pathology department.
3. For virology specimens ie. varicella zoster lesions refer to the PathWest Pathology Handbook or contact the relevant pathology department.
4. Gram stains can be read in 20 minutes and preliminary culture results ready in 24 hours.^{1,2} The result will guide the antibiotic therapy, which can be initiated immediately.^{3,4}

Equipment

70% Alcohol (for decontaminating trolley)

Dressing pack

Dressing trolley

Sterile swabbing solution (sodium chloride 0.9%^{5,6} is normally used to clean wounds)

Disposable gloves

Bag to dispose of used items

Swab kit, contains:

- Sterile swab stick
- Glass slide, with plastic cover in cardboard slide carrier
- Transwab (dual tube with swab stick plus charcoal transport medium)

Additional equipment which may be required

For viral and chlamydial culture – Virus transport medium (VTM) 3mL T6566

PROCEDURE	ADDITIONAL INFORMATION
Positively identify the patient.	Refer to the Pathology Handbook for guidance. (General Guidelines Section 2)
Perform hand hygiene. Don gloves. Note; If dressing present, perform hand hygiene, remove old dressing and repeat hand hygiene.	To prevent the transfer of microbes; gloves should be worn when collecting the specimen. Hands should be decontaminated before and after taking the specimen. ⁷⁻⁹
Clean/Irrigate the wound with a gentle stream of normal saline (room temperature).	Removes surface contaminants and ensures the pathogen which is invading the tissue is collected. ⁷⁻¹² Normal saline cleanses the contaminants without destroying the pathogen. ^{1, 12, 13} A gentle stream ensures that the wound surface is not damaged. ^{9, 13, 14}
Remove excess saline with sterile gauze.	This exposes the wound to ensure a good culture is collected. ¹⁵
Exudating wounds Do not pre moisten the swab. ²	
Non exudating wounds Pre-moisten the swab with normal saline. ^{2, 11, 13}	To aid pathogen recovery. ¹⁶
Sample the whole wound area ¹⁷ including the area(s) showing clinical signs of infection. ^{11, 18}	If wound is too large an area of 1cm ² can be sampled ^{1, 10, 17} or a number of small areas may be sampled. ³
Slide Using a sterile swab stick, swab the wound. Use zig zag motion whilst rotating the swab between the thumb and first finger. ^{2, 9, 11, 13, 14, 17, 19-21}	
Gently roll the swab onto the middle of the glass slide.	A few times, in non overlapping passes. ²²
Using a pencil, write the patient's name and details clearly on the frosted part of the slide.	

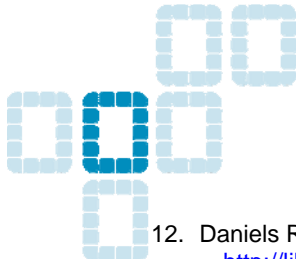
PROCEDURE	ADDITIONAL INFORMATION
Place in plastic slide cover.	Allow to dry in air before closing the cover. ²²
<p>Transwab</p> <p>Use sterile swab stick to swab the wound.</p> <p>Use zig zag motion whilst rotating the swab between the thumb and first finger.^{2, 9, 11, 13, 14, 17, 19-21}</p>	
<p>Immediately place the transwab in the charcoal medium.</p> <p>Note; For viral culture use VTM.</p>	Charcoal medium is recommended as it encourages the survival of organisms. ³
<p>Correctly label specimen(s).</p> <p>Ensure the following information appears on the request form:</p> <ul style="list-style-type: none"> • area the swab was taken from; • patient condition or diagnosis; • if the patient is receiving antibiotics 	Refer to Pathology Manual, General Guidelines Section 2. as different test may be performed in regards to this information. ¹¹
Send the specimens immediately to the lab in the sealed pocket of a Biohazard bag.	Place the fully completed request form in the separate pocket.

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