

FILE NAME SW-AFIST  
OPERATION NO 028  
SURGEON.....M.H.EDWARDS  
Last updated 29 08 06

LAYING OPEN OF ANAL FISTULA

GRADE 3 (VERY DIFFICULT)

THESE STEPS COVER

SURGICAL ASSESSMENT OF ANAL FISTULA

LAYING OPEN OF LOW ANAL FISTULA

i.e.

SUBCUTANEOUS ANAL FISTULA

OR

FISTULA RUNNING THROUGH LESS THAN THE LOWER  
HALF OF THE INTERNAL SPHINCTER

LAYING OPEN OF RECURRENT LOW ANAL FISTULA

LAYING OPEN OF MULTIPLE LOW ANAL FISTULAS

THESE STEPS DO NOT COVER

HIGH ANAL FISTULA

i.e. Running through half or more of the  
sphincter muscle.

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1 PRELIMINARIES - READ ON

2 CHECK YOU HAVE THE CORRECT  
PATIENT

4 CHECK THERE IS NO OTHER  
PROCEDURE TO DO

5 CHECK THERE IS A DIATHERMY  
PAD

6 CHECK THE PATIENT IS SHAVED  
Check the perianal skin is shaved for 10cm.  
around the anal orifice.

Check the skin is shaved for 5cm. around any  
fistula opening.

7 ANAESTHESIA - READ ON

GENERAL ANAESTHESIA

Epidural, spinal and caudal anaesthesia are  
acceptable alternatives.

8 POSITION - READ ON

LITHOTOMY

Make sure that the coccyx is visible.

You need access from the back of the  
genitalia to the coccyx and from one groin  
fold to the other.

Use the Lloyd-Davis position if the patient  
has stiff hips, hip prostheses, or spine  
pathology.

Check the male genitalia are held out of the  
way with a sling of 4" elastoplast.

9 STANCE - READ ON

Stand facing the perineum with the scrubbed  
nurse on your right and an assistant on your  
left.

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10 SKIN PREPARATION - READ ON

Clean the skin from the back of the genitalia to the coccyx and from one groin fold to the other.

Use 2 swabs on sticks with 0.5% Chlorhexidine in 70% Propanol and 1 to dry off.

11 TOWELLING UP - READ ON

12 PLACE AN OPERATING TABLE TOWEL

Tuck a dressing towel firmly under the sacrum.

13 PLACE THE LEFT LEGGING

14 PLACE THE RIGHT LEGGING

15 PLACE AN ANTERIOR SHEET  
DOWN TO THE BACK OF THE  
GENITALIA

16 FASTEN THE TOWELS

Use 4 towel clips to fasten the towels to the skin.

17 ATTACH THE DIATHERMY QUIVER

Clip the quiver to the left thigh.

18 CHECK THE DIATHERMY IS WORKING

19 SHAVE ANY RESIDUAL HAIRS

Use a no.22 scalpel.

20 LOOKING FOR THE FISTULA  
OPENING(S) IN THE SKIN - READ ON

Use a probe.

Usually the openings are obvious holes 1-2mm. in diameter.

Sometimes the openings are on the summits of 5mm. mounds of purplish granulation tissue.

Gentle pressure on the mounds with the probe will show the opening.

Probe for openings in the scars of earlier perianal abscesses or drainage wounds.

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20 CONT

Look very carefully for other openings.

Finger pressure on the perianal tissues may cause pus to ooze out of a hidden opening.

Look for signs of Crohn's disease.  
Complex, multiple openings.

Bluish, oedematous perianal skin,  
and skin tags.

Multiple previous operations.

Look for signs of malignancy.  
Excessive hardness of the  
tissues.

Irregular overgrowths of tissue.

21 TAKE A PUS SWAB

22 PROBING THE FISTULA TRACK(S) - READ ON

Tracks anterior to the middle of the anal canal should run directly towards the canal.

Tracks posterior to the middle of the anal canal should run posteriorly and then hook forwards in the mid-line into the anal canal.

Be prepared for variants to this rule.

The tracks may follow other routes and be double or triple.

Sometimes the opening only admits the probe with some pressure.

Beware of making false tracks or losing the path of a tortuous track due to excessive pressure on probing.

Look out for the anterior track of a urethro-cutaneous fistula.

Look out for a posterior track from a pilonidal sinus.

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23 FINDING THE INTERNAL OPENING(S) - READ ON

24 EXPOSE THE ANAL CANAL

Pass the blades of a 2 bladed St Marks anal retractor fully into the anal canal .

Gently dilate the anal canal digitally to overcome any resistance to passing the retractor.

Openout the blades of the retractor.

Swivel the retractor around to explore the whole circumference of the anal canal.

The internal openings of the tracks may show up as 2-3mm. elevated patches of granulation tissue.

The internal openings are often deeper than expected.

Check the retractor blades are pressed deeply into the anal canal.

Look out for the superficial opening of a subcutaneous fistula.

If no internal opening is obvious, just continue to the next step.

25 IDENTIFYING THE TRACK(S) - READ ON

Pass the probe from the external opening towards any likely internal opening.

In most cases, the fistula is single, with a predictable simple track.

i.e. The probe passes through a solitary external opening, easily along a single track, to emerge through a single internal opening, below or just penetrating the lowest fibres of the internal sphincter muscle.

In all cases, however, look out for:

Multiple skin openings.

Tortuous, branching, and multiple

tracks.

Blind tracks, high and low.

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25 CONT

Multiple and high internal  
openings.

26 ASSESSING THE SPHINCTER - READ ON

Use a finger to palpate the tissue lying  
medial to the probe.

1mm. thickness will be mucosa and submucosa.

The rest will be the internal sphincter  
muscle.

The external sphincter lies laterally and  
does not appear in this operation.

Superficial and low fistulas will have less  
than 2 mm. of sphincter muscle palpable  
between the mucosa and the probe.

High fistulas will have more than 4 mm. of  
muscle between the mucosa and the probe.

This leaves a difficult group of patients  
where it is not clear whether the fistula is  
high or low.

In this group, assume the fistula is a low  
one, unless there are complicating features.

e.g.

Sphincter damaged by previous  
fistulectomy,  
episiotomy,  
sphincterotomy,  
haemorrhoidectomy.

Atrophic sphincter.

A degree of Incontinence.

Inflammatory bowel disease.

27 DECIDING ON TREATMENT - READ ON

The aims of treatment are to obtain healing  
of the fistula and to maintain continence.

The fistula will heal if it is laid open  
like a railway cutting and allowed to fibrose  
into a flat scar.

Continence will be maintained if there is a minimum of about 7mm. of functioning internal

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27 CONT

sphincter lateral to the fistula incision.

Estimate the amount of residual functioning sphincter indirectly by assessing the amount of muscle lying medially!

28 FOR A DEFINITE HIGH FISTULA - READ ON

Refer the patient for specialist advice and treatment.

29 FOR AN INTERMEDIATE  
FISTULA WITH COMPLICATING  
FEATURES

Be conservative.

A permanent minor discharge from a deep fistula may well be acceptable to a patient, rather than major surgery and possible faecal incontinence.

Refer the patient for specialist advice and treatment.

30 FOR AN INTERMEDIATE  
FISTULA WITHOUT COMPLICATING  
FEATURES

Treat as a low fistula.

31 FOR A BLIND TRACK WITH  
LESS THAN 5MM. COVER

Treat as a low fistula.

For a higher blind track, treat as a high fistula.

32 FOR A LOW FISTULA - READ ON

33 LAYING OPEN A LOW FISTULA - READ ON

34 REPLACE THE PROBE WITH  
A GROOVED DIRECTOR

Turn the groove towards the lumen of the anal canal.

35 LAY OPEN THE FISTULA

Cut down onto the probe from internal to external opening using a NO.10 scalpel.

Biopsy the track.

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- 35 CONT                    Send the tissue for histology.
- 36 EXAMINE THE TRACK  
    Probe for any other tracks opening into the  
    deroofed one.  
  
    Deroof secondary tracks as required.  
  
    Record, but do not deroof tracks passing deep  
    to the internal sphincter.  
  
    You will probably be able to palpate the  
    residual internal sphincter through the wound  
    at this stage.
- 37 IF THERE IS ANOTHER FISTULA  
    GO BACK TO STEP 33 (LAYING OPEN THE FISTULA)  
  
    Beware of sphincter damage and  
    incontinence if you lay open more than 2  
    fistulas at one sitting.
- 38 IF THERE ARE NO MORE FISTULAS - READ ON
- 39 CONTROL BLEEDING  
    Coagulate superficial bleeders.  
  
    Apply pressure with gauzes to deeper  
    bleeders.
- 40 DRESSING THE WOUND - READ ON  
    Use Paraffin gauzes.  
  
    Apply 10 dry gauze dressings.  
  
    Apply 2 dry Surgipads.
- 41 FIX THE DRESSINGS  
    Use elasticated net pants.
- 42 CHECK THE SWAB, AND  
    INSTRUMENT COUNTS
- 43 REMOVE THE SLING FROM  
    THE SCROTUM
- 44 FINAL TOUCHES    - READ ON

45 CLEAN THE SKIN

Use a swab with 0.1% Chlorhexidene in 70%  
Propanol to clean the skin surrounding the

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45 CONT dressing.

46 FILL IN THE HISTOLOGY  
AND BACTERIOLOGY FORMS

47 WRITE LEGIBLE OPERATION DETAILS

48 FILL IN THE SURGICAL AUDIT FORM

49 DICTATE AN OPERATION LETTER  
TO THE GENERAL PRACTITIONER  
PLUS  
A COPY TO THE REFERRING PHYSICIAN

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50 EQUIPMENT AND MATERIALS LIST  
(FRIARAGE HOSPITAL)

SURGEON MR EDWARDS      PROCEDURE      LAYING OPEN ANAL FISTULA

GLOVES                      7

PREPARATION      HIBITANE x 2 WET      X 1 DRY

SUTURES                    0

BLADES                    NO.22 , NO.10

DIATHERMY              FORCEPS, LEAD, QUIVER

ADDITIONAL INFORMATION  
DRESSING GAUZE

KNICKERS

BASIC PACK              SMALL LITHOTOMY

INSTRUMENTS      3 SPONGE HOLDERS

4 BACHHAUS

4 TOWEL CLIPS

1 ASSISTANTS SCISSORS

10 CURVED JOLLS FORCEPS

1 NON TOOTHED DISSECTING FORCEPS

1 NEEDLE HOLDER

1 VOLKMANN SPOON

1 PROBE

1 GROOVED DIRECTOR

DRAINS 0

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50 CONT

SURGEON MR EDWARDS PROCEDURE LAYING OPEN OF ANAL FISTULA

PATIENTS POSITION  
LITHOTOMY

TABLE FITTINGS

SPRAYS 0

CATHETERS 0

MATERIALS

USE	MATERIAL NO.	SHELF NO.	MATERIAL SIZE	NEEDLE SIZE	NEEDLE SHAPE
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TIES 0

TRANSFIXION 0

ANASTOMOSIS 0

0

0

0

0

REPAIR 0

CLOSURE 0

FAT 0

SKIN 0

DRAIN 0