

BASIC SURGICAL SKILLS

MODULE: GENERAL SURGERY, UROLOGY, TRAUMA AND ORTHOPAEDICS, PLASTICS, ENT, PAEDS SURGERY, VASCULAR

TARGET: CT1 – CT2

BACKGROUND:

This skills day is best run as a revision day for CT1 level trainees at the start of their rotations. It is a revision of the basic skills that were learned during the RCS BSS course.

RELEVANT AREAS OF THE CURRICULUM

Module 3: Basic surgical skills

Effective and safe hand washing gowning and gloving
Classification of surgical wounds
Knot tying - instrument and hand tied
Suture and needle choice
Closure of skin and subcutaneous tissue
Use of drains - insertion, fixation, removal

INFORMATION FOR FACULTY

This skills simulation will involve 4 stations .
It is suggested that learners rotate around these stations spending around 15 minutes at each station.

SCENE SETTING

4 station technical skills simulation – learners will rotate around the stations

- Station 1 - Gowning and gloving
- Station 2 - Knot tying and suturing
- Station 3 - Excision of a skin lesion, drainage of an abscess
- Station 4 - Abdominal opening and closure

Location: Bench-top laboratory setting
Expected duration of each scenario 15mins with on-going technical feedback throughout procedure

STATION 1 – GOWNING AND GLOVING

It is essential that junior trainees are confident with their sterile technique of gowning and gloving so as to ensure that they are ready to scrub up and assist in theatres.

LEARNING OBJECTIVES

- To select the appropriate sized gloves
- To ensure appropriate safety equipment is worn eg. visors
- Correct hand washing technique
- To be able to gown and glove using a closed gloving technique

STATION 1 EQUIPMENT AND CONSUMABLES

- A scrub sink is required along with appropriate skin cleaning preparations eg. betadine or chlorhexidine
- Scrub brushes
- Scrubs
- Surgical gowns
- Selection of surgical gloves
- Masks
- Theatre hats

PARTICIPANT BRIEFING

Scrub up as if you had been asked to assist in theatres

FACULTY BRIEFING

Please pay specific attention to hand wash technique and gloving technique.

STATION 2 – KNOT TYING AND SUTURING

LEARNING OBJECTIVES

Learners should be able to tie one-handed reef knots both superficially and at depth
Learners should be able to tie a surgeons knot
Learners should be able to perform instrument ties
Learners should understand how to select the appropriate needle and suture material for the task

STATION EQUIPMENT AND CONSUMABLES

Professional skin pad Mk 2 Limbs and Things £33
3/0 Nylon x 4
3/0 Monocryl on a curved needle
2/0 Vicryl x1
Needle holder
Gilles toothed forceps or Adson's forceps
Suture scissors
Haemostat - artery clip
Sharps bin

PARTICIPANT BRIEFING

Demonstrate interrupted sutures - hand and instrument tied
Vertical mattress sutures
Subcuticular suture

FACULTY BRIEFING

Pay particular attention to whether the learners cross their hands during knot tying and whether they make appropriate numbers of throws for the material used.

Ask them to look at the outside of the suture packet and understand the type of material and needle within.

Pay attention to needle mounting and handling.

Look at different types of blades - the shape and how to mount blade on scalpel handle

STATION 3 – EXCISION OF A SKIN LESION AND DRAINAGE OF AN ABSCESS

LEARNING OBJECTIVES

Learners should be able to excise a simple pigmented skin lesion

Learners should be able to excise a sebaceous cyst

Learners should be able to incise and drain an abscess

STATION EQUIPMENT AND CONSUMABLES

Skin lesion and cyst Limbs and Things Part 50074 £28

(or cheaper version Annex Art Part 3000-120 £4.95 (not as good))

Limbs and things abscess Part 50075 £36

(or Annex Art abscess Part 3000-122 £13.40)

Scalpel handle size 3

11 blade and 15 blade

Non sterile gloves

Swabs

Gilles toothed forceps or Adsons

Needle holder

Suture scissors

Vicryl rapide x 2

PARTICIPANT BRIEFING

Excise a pigmented skin lesion

Excise a sebaceous cyst

Incise and drain an abscess

FACULTY BRIEFING

Discuss length of incision required to facilitate closure

Discuss desirable margins for potentially malignant skin lesions

Discuss techniques to avoid undue tension across the wound

STATION 4 – ABDOMINAL WALL OPENING AND CLOSURE

In this station the learners will carefully open a simulated abdomen, place a Robinson's drain and close the abdomen

LEARNING OBJECTIVES

Learners should know Jenkins rule

Learners should understand how to carefully open the peritoneal cavity

Learners should understand how to insert and fix in place a drain

Learners should practice abdominal wall closure taking care not to injure the abdominal viscera

Different types of drain will also be reviewed by the learners

STATION EQUIPMENT AND CONSUMABLES

Abdominal jig Annex Art Part 3000-300 £68 (replacement abdo wall plus balloon £12.90)

(or Limbs and Things Part 60305 £103)

Loop PDS Blunt needle '0' x2

'0' Nylon sharp needle x2

Scalpel handle No4

22 blade

Clips x2

Lane's toothed forceps

Bonneys toothed forceps

McIndoe scissors

Robinson's drain

Yeats tissue drain

Pigtail drain

Redivac drain

Silk stitch '1' straight needle

Roberts clip

PARTICIPANT BRIEFING

Open the abdominal cavity taking care not to injure the peritoneal contents. Insert a Robinson's drain and suture this in place and close the abdominal cavity performing a mass closure technique.

FACULTY BRIEFING

Help the learners to complete the task, please discuss Jenkins rule. Ensure that the drain is sutured in place securely.



BASIC SURGICAL SKILLS- HANDOUT

INFORMATION FOR PARTICIPANTS

KEY POINTS

When suturing ensure that the needle enters perpendicular to the tissues.

Pronate / supinate your hand

Take great care to ensure that reef knots lock

When excising skin lesions plan your incision so that the skin will close easily and be tension free to allow healing.

Use Jenkins rule when performing mass abdominal closure.

WORKPLACE-BASED ASSESSMENTS

PARTICIPANT REFLECTION

What have you learned from this experience? (Please try and list 3 things)

How will you be able to put into practice what you have learned?

Which skills were your particular strengths?

Which were your weaker skills where you need further practice?

PARTICIPANT FEEDBACK

Date of training session:.....

Learner grade:.....

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
I found this simulation useful					
I understand more about the simulation subject					
I have more confidence to deal with this condition					
The material covered was relevant to me					

Please write down one thing you have learned today, and that you will use in your clinical practice.

How could this scenario be improved for future participants? This is especially important if you have ticked anything in the disagree/strongly disagree box.

FACULTY DEBRIEF – TO BE COMPLETED BY FACULTY TEAM

What went particularly well during this skills simulation?

What did not go well, or as well as planned?

Why didn't it go well?

How could the skills simulation be improved for future participants?