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' 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 is 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 in sutured in place securely.
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:**

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<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tbody>
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<td>I found this simulation useful</td>
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<td>I understand more about the simulation subject</td>
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<td>I have more confidence to deal with this condition</td>
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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?