

WOUND MANAGEMENT

Learners Guide

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Duration **2 hrs**

Facilitator level **Senior trainee/Advanced care Practitioner (ANP)**

Learner level **Junior trainee/Staff nurse and Senior trainee/ANP**

Equipment required **Skin glue, paper stitches (Steristrips), suture set, sutures, artificial skin or animal product for demonstration**

PRE READING

Expectation is for the learners to have watched and read the following links prior to the session

<https://dontforgetthebubbles.com/managing-wounds/>

<https://geekymedics.com/category/surgery/suturing/>

<https://litfl.com/own-the-wound/>

<https://dontforgetthebubbles.com/tissue-adhesive/>

Some highly recommended optional extras:

<http://www.rchsd.org/documents/2014/03/pem-articles-pediatric-lacerations.pdf/>

<https://www.rcemlearning.co.uk/reference/soft-tissue-injuries-of-the-hand/#1583314712453-97cc4a3b-8294>

OUTLINE (USE THE SECTIONS THAT ARE RELEVANT FOR YOUR LEARNERS)

- **Basics (10 mins)**
- **Main Session: (4 x 15 minute) case discussions covering the key points and evidence**
- **Practical stations (30-60 mins)**
- **Take home learning points (5 mins)**

CASE 1 (15 MINS)

A 12 year old girl is brought into ED by her mum. As she was making lunch at home, the ring came off a ring-pull can, so she tried to pull open the lid of the can by grasping and pulling the sharp edges. She arrives with a blood soaked tea towel around her hand and is tearful. On examination she has wounds to her thumb, index and middle fingers of her right hand.

What structures require assessment in a wound?

How do you assess neurovascular function in hand injuries?

How do you assess the function of the flexor and extensor tendons?

CASE 2

A 4 year old boy is brought to the ED by his parents. He was playing with his brother in the garden when he tripped and hit his head off the curb. He did not lose consciousness and has not vomited. On examination there is a 6cm horizontal wound with jagged edges and visible contamination on his left forehead.

What techniques can you employ to ensure the child cooperates with assessment of his wound? Discuss non-pharmacological as well as pharmacological.

CASE 3

An 8 year old girl is brought to the department by her Dad. She was cycling in front of the house when she fell off her bike. She has a large area of road rash to her left forearm and left knee. It is visibly contaminated with gravel, dirt and plant material.

How will you ensure this wound is cleaned adequately?

How would your management change if the wound was deemed to be very dirty?

What closure options are available to you?

CASE 4

A 12 year old boy is brought in by ambulance after falling off his bike while swerving to avoid a car. He was wearing a helmet and thinks he did not hit his head. He has a painful right ankle and is unable to weight bear. He has a wound to his mid anterolateral shin. It is horizontal, 4cm wide and approximately 1 cm deep. He is unable to weight bear and has pinpoint tenderness at his lateral malleolus X-ray confirms a non displaced isolated distal fibular fracture.

What size suture would you like to use?

What type: absorbable or non-absorbable?

What do you need to ensure before the child leaves the ED?

STATION 1 (15 MINS)

Description and demonstration of steristrips, glue, different suture materials and equipment.

STATION 2 (20 MINS)

Demonstration and practice of local anaesthetic injection and simple interrupted sutures using either fake skin or animal skin (if using animal products, ensure hygiene standards are adhered to – yellow bin for disposal of gloves and soft waste).

ADVANCED STATION (20 MINS)

This is an opportunity to cover more challenging sutures such as deep dermal sutures and 3 point sutures. It uses the same equipment as Station 2.

<https://litfl.com/own-the-wound/>

Take home tips

- 1 Mechanism is everything, a careful history is essential!
- 2 Examine carefully for damaged structures, deep and distal!
- 3 Wash, wash, wash, and then some more
- 4 Prepare! Position the patient and your equipment appropriately to maximise outcome and comfort
- 5 Safety net and scar advice for all patients and parents

REFERENCES

DFTB blog posts (wound management, hand exam etc)

<https://litfl.com/own-the-wound/>

<http://www.rchsd.org/documents/2014/03/pem-articles-pediatric-lacerations.pdf/>

https://www.rch.org.au/clinicalguide/guideline_index/Lacerations/

<https://geekymedics.com/category/surgery/suturing/>