

Procedures in Paediatrics

Paediatric Clinician Training Induction March 2022



THE UNIVERSITY
of EDINBURGH

Objectives:

- Introduction to procedures in paediatrics
- To understand how to safely perform common procedures in children
- To understand how to safely perform life saving procedures in children

Note: This tutorial does not give you the competency to perform the procedures independently. Further training will be provided.

Introduction:

- Procedures are used to investigate and treat patients who present to the hospital
- Added challenges with children
 - Different sizes
 - Children don't always stay still - particularly when they are scared
 - Young children can't understand why we need to do procedures
 - We need support from their caregivers
- Emergency vs non-emergency procedures
- Procedures all have associated risks

General Principles

- If you are performing a procedure you are responsible for:
 - Explaining to the patient and the caregiver
 - Gaining consent
 - Being competent and safe
 - Knowing the risks
 - Tidying up!!

Have we had the appropriate training to perform this procedure independently?

Safety

- We need to ensure both ourselves and our patients remain safe
 - Use personal protective equipment
 - Use good practices to reduce the risk of infection to the patient
 - Use good practices in the management of equipment
 - Go through the equipment before you start
 - Use your team – do you need more supervision? Do you need help?

Comfort Care

- Procedures are often painful and can be scary
 - The level of comfort required will be situation and procedure specific
 - We need to try to make the experience the least traumatic we can, especially if the patient has a chronic illness which requires multiple procedures
- 1) Distraction techniques
 - 2) Wrapping & Restraining
 - 3) Analgesia and sedation
- (Book 1 p558-559)

Airway Procedures

- Book 2 pg 149 – airway positioning & jaw thrust
 - Video from eLibrary AC14

- Book 1 pg 562 – oropharyngeal airway
 - Video from eLibrary AC25

- Book 1 pg 564 – needle cricothyroidotomy
 - Video from eLibrary AC17

Breathing Procedures

- Book 2 pg 167 – bag mask ventilation
 - Video from eLibrary AC1 and AC2
- Book 1 pg 567 – needle thoracocentesis
 - Video from eLibrary AC18
- Book 1 pg 573 - CPAP

Sharp Safety

- When using needles it is important to prevent needle stick injuries to ourselves and others
- The biggest risk is transmission of blood borne viruses
- Always wear gloves when doing procedures on patients
- Do not leave a discarded needle next to the patient
- Safely discard the needle into a designated sharps bin – this is your responsibility

Circulation

- Book 1 pg 577 – peripheral venous cannulation and blood sampling
 - Video from eLibrary C6
- Book 1 pg 579 – external jugular venous cannulation
 - Video from eLibrary C3
- Book 1 pg 583
 - Video from eLibrary C9
- Book 1 pg 585 - intraosseous needle insertion
 - Video from eLibrary C7 and C8
 - <https://www.youtube.com/watch?v=KHXSfh2ZRDM> (from 1:05)

Other:

- Book 1 pg 591 – NG tube insertion
- Book 1 pg 597 – lumbar puncture
 - Video from eLibrary NV2, NV3 and NV4
- Book 1 pg 600 – suprapubic aspiration of urine
- Book 1 pg 601 – blood glucose measurement

Other:

- Book 1 pg 559 – intramuscular injection
- Book 1 pg 560 – subcutaneous injection
- Book 1 pg 560 – intradermal injection
 - Video from eLibrary P18