INGUINAL HERNIA

INTRODUCTION

- Incidence: 0.5–1% in term babies and 5–10% in premature babies
- Right-sided in 50% of cases, left-sided in 10% and both sides in 40%
- Most cases can be managed with elective surgery before or shortly after discharge from NNU
- Manage incarcerated hernia as a surgical emergency

CLINICAL FEATURES

- Visible swelling or bulge in inguino-scrotal region in boys, inguino-labial region in girls. May be constant or intermittent, becoming more prominent with crying or straining

Simple inguinal hernia

- Often painless, but many babies happier after repair
- Oxygen requirements may fall after repair

Incarcerated inguinal hernia

- Generally presents with a tender firm mass in the inguinal canal or scrotum
- Swelling can be surprisingly small
- Baby may be fussy, unwilling to feed and crying inconsolably
- Overlying skin may be oedematous, erythematous and discoloured
- May be associated abdominal distension, with/without bilious vomiting
- Arrange emergency surgical referral

MANAGEMENT AND REFERRAL

Reducible inguinal hernia

- If asymptomatic, refer by letter to surgeon. Include likely date of discharge and parents' contact details
- Inform parents of the risk of hernia becoming incarcerated
- if baby develops a tense, painful swelling and is in obvious pain, parents should seek **immediate** medical advice
- if swelling not reduced ≤2 hr, complications may arise (bowel compromise – later testicular atrophy)

Incarcerated inguinal hernia

- Stabilise baby
- Administer analgesia (morphine IV), then gently try to reduce hernia
- If fully reduced, arrange elective inguinal hernia repair before discharge. Refer to paediatric surgical team for elective review
- If not reducible, request urgent help from on-call paediatrician/neonatologist
- Keep child nil-by-mouth
- Insert large bore nasogastric tube (NGT), empty stomach and leave on free drainage (see **Nasogastric tube insertion** guideline)
- Obtain IV access and send blood for FBC and U&E
- Start maintenance IV fluids
- Aspirate NGT 4-hrly in addition to free drainage and replace aspirate volume, mL-for-mL with sodium chloride 0.9% with 10 mmol potassium chloride in 500 mL IV. Leave NGT on free drainage
- If hernia remains irreducible, refer urgently for surgical assessment
- Complete detailed transfer letter using **BadgerNet** system. Ensure parental details and telephone contact numbers included
- If possible, ask parents to travel to planned place of surgery to meet with surgical team

WHILE AWAITING TRANSFER TO SURGICAL UNIT

- Reassess baby regularly
- Monitor fluid balance, blood gases, glucose and consider need for fluid resuscitation

USEFUL INFORMATION

- https://bwc.nhs.uk/download.cfm?doc=docm93jijm4n1200
- http://www.e-lfh.org.uk/programmes/paediatric-surgery/