Pyloric Stenosis

University Hospitals of Leicester NHS
NHS Trust

Leicester Children's Hospital

Medical guideline

Background / Introduction:

Pyloric Stenosis is a common condition affecting 2-4 in 1000 babies. It affects more males than females (4:1) and is familial with polygenic inheritance. Babies are usually affected between 2 and 6 weeks of age and can be older in the preterm infant. .A diagnosis of reflux is much more likely (~ 65% of infants at 3 months). Hypochloraemic hypokalaemic metabolic alkalosis on blood gas

Scope:

This guideline is intended for use by medical staff, nurses and other relevant health care professionals.

Symptoms:

- Projectile non-bilious vomiting
- Hungry baby
- Weight loss
- Possible dehydration

Investigations:

- Full blood count
- Urea and electrolytes
- Bicarbonate
- Capillary / venous gases
- Ultrasound of abdomen if no palpable mass is felt and in large infant

Management:

Babies with non-bilious vomiting should be seen in the first instance by the Paediatrician unless the condition has been confirmed by USS in the peripheral hospital or the gasses and history are consistent with the diagnosis.
Inform surgeons if the blood gasses and history are consistent with the diagnosis.

- Nil by mouth
- Insert large – bore nasogastric tube (8Fr) and keep on free drainage with two hourly aspiration
- Perform test feed:

- Feed and aspirate on NG at the same time to prevent vomiting
- Observe for peristaltic waves
- Palpate for pyloric mass

- Commence IV fluids:

Dehydrated	175ml/kg/24 hours of 0.9% Saline / 5% Dextrose with 10mmol KCL per 500ml bag
Not dehydrated	150ml/kg/24 hours of 0.9% Saline / 5% Dextrose with 10mm KCL per 500ml bag
AND Replace gastric losses	ml for ml with 0.9% with Normal Saline 0.9%

- Daily urea and electrolytes
- Capillary gasses ???? daily
- Inform surgeons if blood gas and history consistent with diagnosis
- Inform anaesthetists

Surgery

- Perform only when blood results are normal – Laparoscopic Pyloromyotomy
- Operation to be done in daylight hours
- If perforation, keep NBM 24-48 hours, NGT and administer antibiotics

Post op care

- IV fluids:
  - 150ml/kg/24 hours of 0.9% Saline with 5% Dextrose
- Remove nasogastric tube on return to the ward unless otherwise indicated in operation notes
- Feed when ready (nurse led feeding) and reduce IV fluids accordingly
- Discharge home 24-48 hours post op
- No follow up is required

Legal Liability (standard UHL statement):

Guidelines issued and approved by the Trust are considered to represent best practice. Staff may only exceptionally depart from any relevant Trust guidelines providing always that such departure is confined to the specific needs of individual circumstances. In healthcare delivery such departure shall only be undertaken where, in the judgement of the responsible health professional' it is fully appropriate and justifiable – such decision to be fully recorded in the patient's notes.

References:

1. Key Clinical Topics in Paediatric Surgery

DEVELOPMENT AND APPROVAL RECORD FOR THIS DOCUMENT			
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