NTS Clinical Guideline

Title:	Gastroschisis initial stabilisation and transfer		
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Description

Congenital defect of the anterior abdominal wall to the right of the umbilicus through which abdominal contents (not covered by a protective sac) herniates. Usually it contains intestines, but part of liver and spleen may also protrude.

- Occurs in around 1 : 3,000 births
- Associated anomalies like intestinal atresias are reported in up to 10-20%
- Prematurity and growth retardation are frequent. Young maternal age and substance misuse are risk factors. Survival rates are about 90%.

Management

Airway

- Initiate resuscitation as per NLS.
- There is no need to electively intubate. If respiratory support is required, then the infant must be intubated and ventilated. Mask ventilation and CPAP must not be employed.
- The stomach is usually distended with a significant volume of bile-stained fluid, which can very easily reflux and be aspirated.
- Pass large bore (10F) naso/orogastric tube and empty the stomach. The tube must be left on free-drainage and aspirated every 15 minutes. Distal end of the tube should be lower than the baby. The NG tube is often visible in the correct position through the gastric wall.

Prolapsed gut

- Lay baby on top of a long, pre-cut length of cling film and wrap right around the abdomen with gut lying well supported.
- Stabilise the bowel loops in midline with a doughnut ring made of gauze / absorbent material (not cotton wool). The exposed bowel is then covered with cling film to prevent loss of moisture and heat and also to allow regular assessment of bowel colour and perfusion.
- Avoid letting the gut flop to one side as this can kink the vascular supply and impair perfusion to the gut or adversely affect venous return.
- Positioning of rolled up towels against both sides of the torso may help to stabilise the gut and keep it central.
- **Inspection of gut perfusion on arrival and during transport to be documented. Dusky / purple appearance of bowel is a surgical emergency.**
- Baby should be nil by mouth, and intravenous fluids administered.

Volume replacement

- Fluid losses can be enormous and easily under estimated in these babies. A first bolus of 20ml/Kg of 4.5% albumin over 10 – 15 minutes, to compensate for protein ooze from gut. Low threshold for normal saline boluses.
- Further boluses may be required therefore plan to take these with you during the transfer. Monitor circulation - HR, perfusion, BP, lactate and urine output.
- Normal maintenance fluids of 60ml/Kg/day 10% Dextrose in addition to the above. Replace NG losses ml/ml with 0.9% saline and Potassium Chloride (10 mmol/500ml).
- Monitor temperature carefully – may be large evaporative heat losses.

- Monitor blood sugars
- Give antibiotics. **Transfer to a surgical unit as soon as possible.**