Whole bowel irrigation (WBI)

WBI is not routinely indicated in the management of poisoning. Cases where WBI is considered should be discussed with a toxicologist.

Indications

Consider in life-threatening ingestions of:

Modified release preparations including:

- Calcium channel blockers (verapamil, diltiazem), venlafaxine

Metals: - Potassium chloride, iron, lead, lithium

Body packers and body stuffers

WBI is likely most effective if started within 4 hours of ingestion

Contraindications

- Uncooperative or combative patient
- Unprotected airway or the potential for an unprotected airway
- Ongoing vomiting, ileus (absent bowel sounds)
- Haemodynamic instability

Solutions used for WBI all contain poly-ethylene glycol (PEG)

Utilize ONE of the following PEG electrolyte solutions (PEG-ES):

Brand (amount per sachet)	Preparation of WBI
Movicol (13.7g)	8 sachets in 2 L water
Moviprep (A and B)	A plus B sachets in 2 L water
Glycoprep (200g)	1 sachet in 3 L of water
Glycoprep C (70g)	2 sachets in 2 L water
ColonLYTELY (68.58g)	2 sachets in 2 L water

Technique – please discuss with clinical toxicologist before initiation

Use an iso-osmotic Polyethylene Glycol Electrolyte Solution (PEG-ES) (see table opposite)

1:1 nursing is required for optimal and safe performance of the procedure

Consider securing airway if patient is drowsy/sedated

Insertion of NGT or OGT (14 Fr or greater) is usually required even in awake patients

Confirm position of NGT or OGT prior to commencing PEG

Ensure ALL patients (including those intubated) have head of bed elevated to at least 45 degrees

Administer pro-kinetic antiemetic such as metoclopramide 10-20 mg IV 6-hourly

Administer PEG-ES via the NGT / OGT at a rate of 1- 2 L/hour (children: up to 25 mL/kg/hour)

- *An example method of PEG administration (utilizing Kangaroo™ pump enteral-feeding pump):*
  - *Connect three Kangaroo™ enteral-feeding pumps in series*
  - *Attach three separate PEG solutions, one to run through each pump*
  - *Run each pump at 400 mL/hour (max. rate) to deliver total of 1200 mL/hour via NGT or OGT*

Perform regular abdominal examinations and cease if distention or no bowel sounds

Monitor electrolytes two-hourly as prolonged WBI may cause fluid shifts

Therapeutic Endpoint

- Clear rectal effluent (may take 12-24 hours – *discuss with toxicologist if WBI > 24 hours planned*)
- AXR may allow assessment of ongoing WBI for radio-opaque exposures (iron, potassium)

Complications

- Vomiting, aspiration (ensure regular oropharyngeal suctioning to prevent pooling)

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