

Whole Bowel Irrigation

Whole bowel irrigation (WBI) is used to cleanse the gastrointestinal tract of its contents and thus prevent absorption of ingested substances. Experimental data and anecdotal reports have shown decreases in the absorption of drugs when this decontamination technique is utilized. Despite this, conclusive data via controlled clinical trials to prove that WBI improves the outcome of poisoned patients is currently lacking. As such, WBI should not be a routine practice. However, WBI may be considered in certain clinical situations following consultation with a regional poison center.

The primary applications for WBI are ingestions of substances not well adsorbed by activated charcoal such as lithium, iron, lead, and other metals, as well as sustained-release products and enteric-coated formulations. Also, the removal of ingested packets of illicit drugs in the setting of a body packer may warrant the use of WBI.

Polyethylene glycol electrolyte solution (PEG-ES, GoLYTELY[®], CoLyte[®]) is administered orally, or preferably via a nasogastric tube given the large volume of irrigation fluid required. The PEG-ES is given at a rate of 25 mL/kg/hour in patients 9 months to 12 years old, and at a rate of 1500-2000 mL/hour in patients \geq 12 years of age. The rate of irrigation is continued for 4-6 hours or until rectal effluent is clear.

WBI should not be employed as a decontamination method if the patient has significant gastrointestinal dysfunction such as ileus, perforation, or obstruction. Additionally, if the patient is hemodynamically unstable or volume depleted, WBI should be avoided. It is also recommended that electrolyte and fluid status be monitored as mild alterations in volume status and electrolytes may be present with prolonged use, despite the fact that PEG-ES solution has been formulated to avoid significant disturbances. An assessment of aspiration risk, especially in those who are lethargic or at risk for seizures, is also warranted, as a compromised or unprotected airway would not allow for the use of this procedure. Adverse events associated with WBI and include nausea, vomiting, abdominal cramps, and bloating.

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DID YOU KNOW THAT... whole bowel irrigation was utilized in 2,283 cases reported to poison centers in 2008?

This amounted to 0.09% of the more than 2.4 million human exposures that poison centers were consulted on that year. The majority of those cases (1,703) were adults \geq 20 years old, while 139 cases were children \leq 12 years old, and 435 were teens (6 cases were unknown age).

