

Memorandum

To: Family Physicians, Community Pharmacists, Public Health Nurses

From: IWK Gastroenterology and IWK Pharmacy

Subject: Managing infants with gastro-esophageal reflux

Date: Fall 2011

Gastro-esophageal reflux (GER) is a normal physiological process that occurs in all infants, children and adults. In infants, the peak incidence of regurgitation (spitting-up) and vomiting occurs at about 4 months of age. In most cases, this problem is benign and is sometimes referred to as functional regurgitation or physiological reflux of infancy. However, in some cases the infants develop significant symptoms and complications, in which case the problem is termed gastro-esophageal reflux disease (GERD). GER does not require any treatment other than reassurance and in some cases the lifestyle changes mentioned below. GERD will require therapy. Management of GERD may include one of the following:

Lifestyle changes

Due to a lack of evidence of the efficacy of acid-suppressing drugs in infants the newest guidelines¹ recommend a trial of the following non-pharmacological interventions first:

- Avoid overfeeding: give more frequent smaller feeds
- Burp the baby during and after feeding
- Do not place the baby in car seats for long periods of time
- Ensure that the baby stays upright for about 30 minutes after feeds
- Do not allow the baby to come into contact with cigarette smoke

Feeding

If the above interventions do not help, then there are some modifications to feedings that can be made:

- Formula can be thickened with rice cereal or an anti-regurgitant formula such as Enfamil Thickened A+[®] may be used.
- A **two-week trial** of an extensively hydrolysed protein formula (e.g. Pregestimil A+[®], Nutramigen A+[®], Alimentum[®]) may help identify infants who may have an allergy to cow's milk protein. A partially hydrolysed formula (e.g. Carnation Goodstart[®]) is NOT sufficient for this.
- For breast-fed infants, the mother may **trial** a strict milk protein free diet for two weeks.

Drugs

A short trial of ranitidine may be helpful at the following dosage:

Ranitidine: 5-10 mg/kg/24h PO divided BID-TID.

Proton Pump Inhibitors: Use should be limited as there is little evidence to support their use in infants with GERD. There is also increasing concern about the potential adverse effects of chronic gastric acid suppression.

Prolonged medical therapy and/or significant ongoing symptoms should prompt further investigations and referral.

Tachyphylaxis may develop rapidly with ranitidine and is a drawback to chronic use.

Information for Families: Refer families to the IWK's patient leaflet [Spitting-up & Reflux](#).

Also www.gastrokids.org has excellent resources for families and health care providers.

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1. Pediatric Gastroesophageal Reflux Clinical Practice Guidelines: Joint recommendations of the NASPGHAN and ESPGHAN. [JPGN49:498-547, 2009](#).