Spitting Up

(Gastroesophageal Reflux Disease/GERD)

McKenzie Pediatrics (May 2000)

What Is Regurgitation?

Regurgitation is the effortless spitting up of 1 or 2 mouthfuls of stomach contents, usually within 15-30 minutes after a feed. It often begins between 2-6 weeks of age, and occurs in more than half of infants regardless of breast or bottle feeding. It usually resolves by 6 to 9 months of age, though occasionally longer.

While parents often are impressed with the amount their healthy baby can regurgitate, usually the actual amount is far less than parents guess. Try this experiment: fill a 5-ml. (1 teaspoon) syringe with water, and squirt the water onto a piece of cotton fabric (like a T-shirt). The size of the "spill" as it spreads looks quite large compared to the relatively small volume of 1 teaspoon! A single ounce of milk contains 6 teaspoons! Babies who simply just regurgitate frequently grow just fine.

What Is GERD?

Gastroesophageal reflux disease (GERD) implies regurgitation of sufficient volume and frequency to cause symptoms for the infant. Babies may not even have to actually "spit up" very much to have GERD. The symptoms include: **arching, crying, & stiffening** with or without spitting up. These symptoms may precede, occur during, or occur even up to 1-2 hours after a feeding. The adult equivalent of GERD is commonly known as **"heartburn"**.

GERD occurs more often in bottle feeding babies, but does occur in those breast feeding. Often, symptoms occur with regularity during a certain period of time during the day. This is due to the fact that the acid level of our stomach juices varies throughout the day, higher sometimes and lower at other times. GERD is one of the most frustrating conditions any parent could encounter with their young infant.

What Do I Do If My Baby Has GERD?

- Be ready for lots of crying. Babies who have GERD are also often "colicky", for reasons we don't entirely understand. This, too, shall pass.
- Develop a support system for breaks away from your baby in order to remain patient, loving, and calm. Recruit grandparents and friends to give mom an occasional break. Parents should try to go for short walks, or to a movie, or to dinner, to regain composure and have some "adult" time.
- **Avoid lots of stimulation.** Babies with GERD, as well as with colic, need a low-stimulation environment. Feed them in calm and quiet locations with low lights. Feed them consistently in that location. Keep visitors to a minimum, and have them stop by in groups, preferably in the morning, which is usually the best time of the day for these babies.
- **Feed your baby,** whether bottle or breast feeding, **in an inclined position,** never flat. **Keep your baby upright for at least 20 minutes after feeding,** and avoid bouncing or jiggling your baby after feeding. Consider placing the baby in a front pack during this time and walking around with her. "Bouncie seats" are ok, too, but avoid the vibrator. Swings should not be used in babies with GERD since the seated position causes more acid reflux.
- If bottle feeding, be sure to **hold the bottle upright**, rather than horizontal, during feeding so to reduce the amount of air the baby is swallowing with the formula.
- Burp your baby between breasts and after he's finished. Consider just feeding one breast at at a time, and more frequently. If bottle feeding, feed smaller amounts more frequently, and burp after every 1-2 ounces when the baby takes a pause and is looking around.

- Avoid tight diapers, as this also increases pressure within the abdomen and leads to more acid reflux.
- Mom's should consider a trial of a dairy-free diet, including no soy-dairy products. Some babies have GERD worsened or, rarely, caused by, milk-protein allergy. A 5-7 day trial should be sufficient to see if the GERD symptoms improve. Moms also need to, as always, avoid caffeinated beverages (sodas, coffee, teas) and chocolate (which contains caffeine) while breast feeding. Caffeine, as in adults, can worsen heartburn symptoms.
- Avoid exposure to tobacco smoke. Passive smoke can lead to further weakening of the valve between the esophagus and the stomach, leading to increased acid reflux.
- Infants with significant GERD, under advisement of their physician, may need to be slept on their *stomach* to decrease symptoms when put down to sleep. Of course, in order to reduce the risks of SIDS, the baby should only sleep on a firm mattress with a fitted sheet, with no nearby pillows or soft bedding materials. It is also a good idea to raise the height of one end of the crib to 30 degrees to help reduce reflux.

What If All This Doesn't Help?

- If bottle feeding, your baby's doctor might try an "elemental" formula such as Alimentum or Nutramigen for 5-7 days to see if GERD symptoms are reduced.
- Before medications are started, most babies will need to undergo a test known as a **Barium Swallow**, or Upper GI Study, to confirm the GERD, and rule out an anatomic problem with the stomach. The results of this test seldom is anything besides GERD
- Some babies will be started on an acid-blocker known as **Zantac**. This will be started at a low-dose best given 10-15 minutes before feeding, every 6 hours. If little or no improvement is seen, a higher dose given before feedings every 8-12 hours might be tried. If improvement is only modest, but the baby is still often miserable, a complete acid-blocker known as **Prilosec** might be tried, given once daily. But this medication only comes in capsules, and is difficult to give to babies since it must be broken open and poured in the baby's mouth, then rinsed down.
- Most infants improve at least somewhat with Zantac. The usual length of time an infant will need to be on this medication is until 4-6 months of age, and the dose will be adjusted every 1-2 months as the baby grows
- Keep in mind, the goal of Zantac therapy is to reduce or eliminate the *symptoms* of GERD, but amount of actual "spitting up" might not be noticeably different

* In addition to Zantac, some babies are tried on a medication called **Reglan**. This drug has the effect of improving the emptying of the stomach in a minority of babies, helping then to reduce the amount of stomach acid that can be refluxed.

- Consultation with a pediatric gastroenterologist will be sought if there is still little or no improvement despite all the above interventions, or sooner if the baby is losing weight, or experiencing any respiratory symptoms caused by the GERD. It is important to note, however, that **the vast majority of infants with** GERD still grow **excellently**...the GERD is simply, though importantly, a quality of life issue.