

# PARENT EDUCATION

## **Gastroesophageal Reflux**

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The esophagus is the tube connecting the mouth and the stomach. Gastro-esophageal reflux is the return of stomach contents into the esophagus. Spitting up is part of a baby's life. They lay on their back all the time. This can give heartburn to anyone. Add to that their immature stomach inlet pressure, the acidity of the milk, the small stomach, and the lack of solid food and the result is reflux and more reflux.

Gastro-esophageal reflux is a form of regurgitation, which happens with no intentional effort to vomit. It comes out of the nose occasionally, and it does not have to reach all the way out of the body. It can be subclinical or hidden and reach the throat, the airway, or the mouth and cause symptoms without being obvious. Vomiting is different. It is intentional to relieve some of the nausea associated with it. It is more serious and can be due to many illnesses.

More than 90% of newborns have reflux at least a few times daily. It is called a disease only if it is significant. When babies are spitting up after almost every feeding, spitting large amounts up, gagging, wheezing, stopping to breathe, screaming, not gaining enough weight, or failing to thrive, they are said to have the reflux disease and need to be treated.

If your child has reflux, the following measures can help:

- 1). Thicken the formula with rice cereal or starch. Add 2-4 tablespoons of dry rice cereal to each 4 oz. of formula. Please make sure to make the nipple hole wider by cutting a + over the hole.
- 2). Feed the baby upright and keep the baby upright for 20 minutes after feeding.
- 3). When awake, put the baby in the prone position. Avoid supine or semi-seated position. Reflux is much worse in the infant car seat position.
- 4). Avoid feeding the baby large amounts of formula, and give the baby small frequent feedings. Burp the baby after every 1-2 oz. of formula.
- 5). Avoid swinging the baby.
- 6). Elevate the bed head for about 45° angle. You can do that by placing books or blocks under the bed mattress. Avoid placing pillows or sheets under the head as this will only bend the infant neck and might harm the baby.
- 7). Reflux harness for infants helps in moderate to severe reflux.
- 8). For older children, avoid the following food especially before bedtime: Fatty food, citrus fruits, cooked tomatoes, carbonated drinks, coffee and caffeine, ground beef, spicy food, and for adults alcohol and tobacco smoking.
- 9). For older children, fasting before sleeping helps in reducing the symptoms if tolerated by the child.
- 10). Please call back immediately if your infant or child has any of the following:
  - a) Increase in the child's symptoms.
  - b) Weight loss or poor weight gain.
  - c) Severe chest or stomach pain.
  - d) Bloody or bile-stained vomiting.
  - e) Bloody stools.
  - f) Dehydration signs like dry eyes, lips, and skin, irritability, weakness, or decreased urination.
  - g) Coughing, wheezing, difficulty breathing, or fast breathing.
  - h) Difficulty or pain on swallowing.

These are enough to treat most babies and children with the reflux disease. Some babies and children need medications or a trial of hypoallergenic formula or diet. Rarely surgery is necessary.