Medical Xpress

Even doctors get confused about reflux disease in babies

May 2 2016

Millions of Americans currently use medication for their indigestion and reflux, so it may come as no surprise that parents and doctors also prescribe medicine for newborns with reflux. However, according to a new study, newborns are likely being over treated the majority of the time with interventions - including surgery - that have risks for the infant.

Gastric reflux is common in infants because the band of muscle, or sphincter, that squeezes the top opening of the stomach shut, does not yet close at full strength, especially in premature babies. As a result, babies often have reflux and spit up after feeding. When reflux happens within several minutes of other more dangerous symptoms such as drop in heart rate, apnea, coughing or gagging, arching of the back, incessant crying, and wheezing, physicians may suspect gastric reflux disease, or GERD.

"Since the baby can't tell us what they are feeling, we use this association between the reflux event and these other symptoms and signs of discomfort to help diagnose reflux disease," says senior author on the study, Zubair H Aghai, M.D., Professor, director of neonatology research at Thomas Jefferson University, and attending neonatologist with Nemours duPont Pediatrics at Jefferson Hospital. "However, our study demonstrates that these symptoms may not be associated with reflux and should not necessarily indicate treatment."

Instead of relying on clinical symptoms, some of which can be either

underreported or over reported by nurses or family members, the researchers used a more definitive approach. The researchers compiled the data of 58 infants. Based on their symptoms all of these patients were suspected to have GERD by their doctors. However, the researchers showed that when a gold standard test for gastric disease called the multichannel intraluminal impedance study (or the MII-pH) was performed, only 6 patients, or 10 percent, actually had GERD. The results were recently published in Journal of Pediatric Gastroenterology and Nutrition.

Treatment for GERD in infants includes two types of drugs. The first are drugs such as ranitidine (Zantac), famotidine (Pepcid), and lansoprazole (Prevacid), which reduce acid in the stomach. However, research suggests acid is not a major factor in infant reflux and use of antacid in infants can lead to increased risk for infection. The second type is called metoclopramide or reglan, which has a black box warning for the risk of causing permanent damage to child's brain leading to movement disorders. A third option is surgery to tighten the sphincter at the top of the stomach. All of these interventions come with risks for the infant, and are often prescribed on the basis of symptom association alone.

"The study suggests that doctors who suspect infants of having GERD should use the MII-pH to confirm the diagnosis before treating with medications or surgery," says Dr. Aghai. Unfortunately, says Dr. Aghai, the reason the test isn't done more often is that it can require advanced training and expertise that isn't available at all institutions.

Other than providing medication when it's not needed, misdiagnosing GERD in infants also masks the real cause of the problem. "When the MII-pH comes back negative, we have to do a better job of investigating the root causes of the symptoms we're seeing," says Dr. Aghai.

More information: Apryle Funderburk et al. Temporal Association

Between Reflux-like Behaviors and Gastroesophageal Reflux in Preterm and Term Infants, *Journal of Pediatric Gastroenterology and Nutrition* (2015). DOI: 10.1097/MPG.0000000000000968

Provided by Thomas Jefferson University