

Guide for Parents with Children who have Dental Signs of GERD

GER - gastroesophageal reflux

GERD - gastroesophageal reflux disease

The effect of GERD on the teeth: When stomach acid (pH 2) arises into the mouth, the teeth can be affected. We have observed areas of dental erosion in your child's teeth. This takes the form of "reverse architecture" in that what were once cusp tips are now areas of pot holes or moon cratering. These "pot holes" may become sensitive to touch or temperature. These erosion areas can expand and deepen to the point they cause fillings to be washed out. The acid can expose the nerve inside the tooth. Stomach acid also makes untreated cavities worse.

Pediatric Symptoms resulting from GERD

Child reports burning or acidic taste in mouth

Child reports frequent "hot burps" or "baby vomit"

Child reports burning in the area of their heart or a stomach ache

Child has frequent belching after meals

Child's breath has an acidic odor especially in the morning before breakfast

Child is continuously coughing during sleep (usually GERD, not Asthma)

Child has chronic hoarseness/ laryngitis/ pharyngitis

Child reports that is painful to swallow

Associated Conditions

Asthma / ADHD / Cerebral Palsy / Premature birth / Failure to thrive

Dental Manifestations

Enamel erosion (pot holes or moon craters) from the stomach acid washing over the teeth

Tooth sensitivity can develop once the enamel covering is gone

Acid reflux can make untreated cavities worse

Dental fillings (amalgams or resins) will start to appear taller than surrounding tooth structure

In severe cases of GERD, the tooth nerve can be exposed - OUCH!

Eliminate other potential causes of enamel erosion

Do not eat sour candies (sour skittles, sour gummies, sour patch kids, sour war heads, etc)

Avoid acidic drinks (sodas, juices)

Suggested Dietary Changes to help reduce GERD

Avoid fried foods, spicy foods, mints, acidic juices (OJ with pulp) and sodas

Avoid over eating (super sizing) and eating too fast --- enjoy every bite

Don't lie down after eating (takes 2 hours for the stomach to empty)

Don't eat near bedtime

Place a 2x4 under the head of the bed vs. two pillows

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Continued GERD info

Other Tips

Read up on GERD (On the internet - type "GER" or "GERD" into the search engine)

Work with your child to assist him/her to be able to accurately describe:

- what it feels like when reflux occurs
- how often reflux occurs
- what time of day it occurs (bedtime, after meals, upon awakening, etc)
- whether certain foods trigger reflux (make a list - pizza, spaghetti, fried chicken, sodas)

What to do now:

If you confirm that your child does indeed have symptoms of GERD, then contact your physician for an evaluation. Your physician may recommend trying medication or further diagnostic tests. Your physician may recommend a referral to a Pediatric GI Specialist for diagnostic testing (endoscopy, 24 hour pH probe, etc)

Medical Treatments for GERD may include:

Zantac, Prevacid, Prilosec, Reglan (medications to prevent reflux)

Surgical correction - Nissen fundoplication / pyloroplasty

Long-term Dental Risks - if untreated, GERD can cause irreversible tooth structure loss

Long-term Medical Risks - chronic untreated GERD can lead to esophageal (throat) problems in adulthood

References:

Linnett V, Seow WWK: Dental erosion in children: A literature review. Pediatr Dent 23:37-43, 2001.

Laegergren J, Bergstrom R, Lindgren A and Nyren O: Symptomatic gastroesophageal reflux as a risk factor for esophageal adenocarcinoma. N Engl J Med 340:825-831, 1999.

Rudolph C, Mazur L, Liptak G, et al: Guidelines for evaluation and treatment of gastroesophageal reflux in infants and children. J Pediatr Gastroenterol Nutr 32 (Suppl 2): S1-S31, 2001.

Treatment of pediatric gastroesophageal reflux disease: current knowledge and future research. J Pediatr Gastroenterol Nutr 37(Suppl 1): S1-S75, 2003.

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