ITALIAN JOURNAL OF PEDIATRICS

MEETING ABSTRACT Open Access

Gastroesophageal reflux disease and oral manifestations

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From 70th Congress of the Italian Society of Pediatrics, Joint National Meeting SIP, SICuPP, SITIP
Palermo, Italy. 11-14 June 2014

Gastroesophageal Reflux (GER) is a common condition in childhood characterized by the rise of gastric contents into the esophagus. According to the International Consensus of the Montreal, gastroesophageal reflux disease (GERD) is defined as "the condition that develops when the retrograde passage of gastric contents causes troublesome symptoms and/or complications that result in an impairment of the quality of life of these patients" [1]. In pediatric population, there are conditions at risk of developing GERD, like neurological impairment, history of esophageal atresia repaired and obesity [2]. The typical symptoms can include heartburn with or without regurgitation. For extra-esophageal syndromes, only dental erosions and Sandifer syndrome are considered conditions related to GERD. Acid reflux at the level of the oral cavity, in fact, can cause the dissolution of the tooth enamel, especially at the level of the palatal surfaces of the back teeth, with a reported prevalence of up to 42% [3]. In a pediatric cross sectional study, in 112 children was found a significant incidence for dental erosion in patients with GERD respect to control group, both in primary and permanent teeth [4]. In general, however, oral manifestations of GERD are reported mainly. In pediatric population, the dental erosion are not considered primary extra-esophageal manifestation of GERD because, when present, can be associated at multiple factors [5]. The typical manifestations can be considered dental caries, dry mouth, feeling at oral acid/burning sensation, halitosis, erythema of the palatal mucosa and uvula. For diagnosis is mandatory exclude other causes, like dietary factors, drugs, poor oral hygiene, eating behavior disorders, genetic and racial factors. The esophageal pH monitoring and/or endoscopy are usually necessary just to confirm the diagnosis of GERD. In this group of patients it's possible to start a pharmacological therapy in association with modifications of the diet (quantity and frequency of intake of foods and reduction of the beverages that contain fat, sugars and acids) to decrease the time of exposure at gastric acid and secretions. Therapeutic options are based on the medical treatment or surgery in severe cases [6], although there are few studies to evaluate the efficacy of the treatment of GERD to prevent oral cavity lesions.

Published: 11 August 2014

References

1. Vakil N, Veldhuyzen van Zanten S, Kahrilas P, Dent J, Jones R: **The Montreal definition and classification of gastro-esophageal reflux disease (GERD) - a global evidence-based consensus.** *Am J Gastroenterol* 2006, **101**:1900-20.
2. Lightdale JR, Gremse DA: **Section on Gastroenterology, Hepatology, and Nutrition. Gastroesophageal reflux: management guidance for the pediatrician.** *Pediatrics* 2013, **131**:e1684-95, doi: 10.1542/peds.2013-0421. Epub 2013 Apr 29.
3. Gregory-Head BL, Curtis DA, Kim L, Cello J: **Evaluation of dental erosion in patients with gastroesophageal reflux disease.** *J Prosthet Dent* 2000, **83**:675-680.
4. Farahmand F, Sabbaghian M, Ghoudousi S, Seddighoraee N, Abbasi M: **Gastroesophageal Reflux Disease and Tooth Erosion: A Cross-Sectional Observational Study.** *Gut Liver* 2013, **7**:278-281.
5. Pace F, Pallotta S, Tonini M, Vakil N, Bianchi Porro G: **Systematic review: gastro-oesophageal reflux disease and dental lesions.** *Aliment Pharmacol Ther* 2008, **27**:1179-1186, Epub 2008 Mar 27.
6. Crighton A: **Paediatric gastrointestinal conditions and their oral implications.** *Paediatr Dent* 2013, **23**:338-45.

doi:10.1186/1824-7288-40-S1-A73
Cite this article as: Romano and Cardile: **Gastroesophageal reflux disease and oral manifestations.** *Italian Journal of Pediatrics* 2014 **40**(Suppl 1):A73.

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