

## Lifestyle Intervention for Infant's Gastroesophageal Reflux in Persian Medicine

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### Dear Editor- in –Chief:

Gastroesophageal Reflux Disease (GERD) characterized by a backward movement of gastric contents from the lower esophageal sphincter (1). GERD is the exacerbated and pathologic form of Gastroesophageal Reflux (GER) accompanied by symptoms and complications of damage to the esophagus (2). Vomiting is the most common symptom of this disease, which occurs in 50% of children; it will peak in 4 months and decrease over a year (3). An infant's reflux often brings about regurgitation and symptoms of esophagitis (e.g. irritability, arching, choking, gagging and food refusal) and therefore causes delayed growth (4). Due to high prevalence of this disease and side effects of drugs in infants, it is necessary to find simple remedies for prevention and reduce the complications of GERD. Persian Medicine (PM) as a branch of complementary medicine has some recommendations to prevent infant's gastrointestinal disease. Although these recommendations are recorded hundred years ago, many of them has been approved in conventional medicine. In Persian literature, clinical symptoms such as (Joshā-e Hāmiz) regurgitation of sour material and (Horqat laz') heartburn are similar to GERD (5). Iranian physicians have proposed the following recommendation:

**Key Words:** Infants, Lifestyle, Gastroesophageal Reflux, Persian Medicine.

\*Please cite this article as: Mohammadi Kenari H, Karimi Z, Akhavan M. Lifestyle Intervention for Infant's Gastroesophageal Reflux in Persian Medicine. Int J Pediatr 2020; 8(11): 12439-441. DOI: **10.22038/IJP.2020.48197.3882**

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Received date: Feb.28, 2020; Accepted date: Apr.22, 2020

### **A. Mother's life style and nutritional intervention:**

In Avicenna's point of view, as one of the famous PM physicians, the most important factor in the treatment of infants is the mother's nutrition.

1. Mother should avoid foods that weakens the digestive system such as watermelon, apricots, yogurt, and glazed foods such as Alou Bukhara plum.
2. Quickly digestive foods such as birds' meat and high-nutritional foods like Wheat, Lamb, ficus carica, Grapes, sweet almond and hazelnut are recommended (6-8).

### **B. Infant's lifestyle modification and physical manipulations**

#### **a. Breastfeeding modification**

1. For proper digestion and prevention of bloating in infant, breastfeeding should begin with small amount and increase gradually. Therefore, the infant's stomach would not be overfilled with milk every time (6, 7, 9).
2. Breastfeeding should be performed based on request and desire of the baby, and after a little crying and fidgeting (7, 8).
3. Putting the baby in a good position, which the nipple and brown aura are placed in the mouth completely is an important technique for breastfeeding (9).
4. Mothers who have high amount of milk should be careful that do not entry high amount of milk into the baby's stomach suddenly (7).

#### **b. infant's sleep and importance of cradle**

1. Sleep improves digestion, especially when the baby consumes a lot of milk (6, 9).
2. Reading a lullaby with a delightful sound makes the infant relax.
3. Soft movement of the cradle is a kind of exercise for the infant, however, the rapid movement should be avoided after breastfeeding either in the cradle or in a hug because it causes mal-digestion.
4. Baby's head should be placed in higher position than the legs so that the contents of the stomach do not return to the mouth (6, 7, 9).

#### **c. Bathing and body massage with oil**

1. Baby bath should be at the beginning of the day that the stomach is empty and milk is digested after a long sleep.
2. Body massage with olive, almond, and sesame oil after the bath (6).

### **CONCLUSION**

According to this study, Persian Medicine has proposed several methods that can prevent the symptoms of reflux or at least reduce the severity of these symptoms. Although these recommendations are recorded hundred years ago, many of them have been approved in conventional medicine. Further clinical studies are recommended to investigate their effectiveness.

**CONFLICT OF INTEREST:** None.

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