



AN UPDATED REVIEW OF INFANTILE COLIC W.S.R TO UDARASHOOLA

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ABSTRACT

Infantile colic is one, which exhibits a symptom complex of paroxysmal abdominal pain presumably of intestinal origin associated with severe crying. It usually occurs in infants younger than 3 months of age. The important reason of this symptom is aerophagia. Infantile colic is defined according to wessel's criteria, but symptoms are restricted to crying for more than three hours a day, for more than three days a week, for more than three weeks. Ayurvedic classics describes the features of Udarashoola (colic) as the child rejects the breast, cries, sleeps in supine position, has stiffness of abdomen, feeling of cold and perspiration on face sudden screaming with flexion of thighs and flushing or frowning of face occur at a precise time in the evening in a clockwise regularity and may last for a couple of minutes or hours. These babies are typically healthy throughout the day but develop paroxysmal excessive crying spells in evening. Infantile colic can be correlated with Udarashoola in Ayurveda Samhitas. Udarashoola is condition where one express high intensive pain in abdomen. Stanya dushti is one of the principle causative factors for disease development in an infant.

KEYWORDS: Infantile colic, udarashoola, stanya dushti.

INTRODUCTION

Pain is defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage. In Ayurveda it is said that the origin of pain is due to vitiated Vata dosha. Hence in pain management Vata has to be managed accordingly. Udara shool is condition where one expresses high intensive pain in abdomen. Udara shool(colicky abdominal pain)in infancy occurs due to many causes. Despite the prevalence of the condition, the pathogenesis remains incompletely understood. One hypothesis has suggested that infantile colic is caused by the impact of abnormal gastrointestinal motility and pain signals from sensitised pathways in the gut viscera. Another hypothesis is that inadequate amounts of lactobacilli and increased amounts of coliform bacteria in the intestinal microbiota influences gut motor function and gas production, which subsequently contributes to the condition. More controversially, behavioural issues such as family tension, parental anxiety, or inadequate parent-infant interaction have also been explored as causative factors for infantile colic. In addition, little is known about concomitant risk factors; however, maternal smoking, increased maternal age, and firstborn status are thought to be associated with the development of infantile colic. No association with feeding method has been noted. As a consequence of the lack of understanding of the cause of the condition, a wide spectrum of treatment modalities

have been suggested, with each one targeted to address a postulated cause.

Rome IV criteria for infantile colic

1. Age of baby < 5 months when symptoms start and stop.
2. Recurrent and prolonged periods of crying fussing or irritability that start and stop without obvious cause and cannot be prevented or resolved by caregivers.
3. No evidence of failure to thrive, fever or illness.
4. Caregiver reports crying/fussing for > hours per day or >3 days a week.
5. Total daily crying is confirmed to be > 3 hours when measured by at least one prospectively kept 24 hour diary.

Etiopathogenesis

Etiological factors mentioned in the Ayurvedic literatures for Udarashoola are mostly described for aged individuals. However Kashyapa samhita's descriptions on Udarashoola features are mere identical with infantile colic. The causative factors & pathophysiology of Shoola are described as a voluntary retention of Flatus, Stool, Urine, over eating, indigestion, eating before the digestion of previous food, over exertion, foods which are incompatible in their combination, drinking water when hungry, use of germinated grains, dry food or

cakes of dry meat as well as use of other such foods which aggravates the Vata Dosha, are the causative factor of Shoola. As infantile colic is concerned aerophagia, improper feeding posture of mother, evening time fast feeding from breast, and if mother takes incompatible foods etc. are the reason for Vata vitiation and causes colic². Infantile colic is unexplained, probably relates to aerophagia or behavioural problem. crying leads to further aerophagia with colic-crying - colic cycle. With respect to the aetiology of colic, from the point of view of gastroenterology, gastrointestinal immaturity or allergy, intolerance of Cows milk, malabsorption and gastroesophageal reflux. The hypothesis that colic could be the result of intolerance of Cows milk, treatment employing soya milk or hypoallergenic formulae have produced reductions in symptoms. Management of infantile colic, from the point of view of modern science, pharmacological treatment is essentially supportive with rocking and burping the baby though a mild antispasmodic may be used. Administration of antispasmodic drops 30 minutes before the anticipated time of colic and placing the baby in prone position for effective release of wind from above and below provide some relief of most babies. The use of probiotics in infantile colic is based upon the hypothesis that aberrant intestinal microflora could cause gut dysfunction and gas production, contributing to symptoms. Probiotics have been shown to provide relief to some infants³.

DIFFERENTIAL DIAGNOSIS OF COLIC SYMPTOMS IN INFANTS⁴

Infection:-Meningitis, urinary tract infection, otitis media
 Gastrointestinal:-Constipation, cow's milk protein allergy, gastro-oesophageal reflux disease, inguinal hernia, intussusception, anal fissure
 Metabolic:-Hypoglycaemia, inborn errors of metabolism
 Neurological:-Hydrocephalus
 Trauma:-Non-accidental injury, accidental trauma

RED FLAG SIGNS AND SYMPTOMS⁵ SIGNS

- Irritability, tachycardia, pallor, mottling, poor perfusion
- Petechiae, bruising, tachypnoea, cyanosis, nasal flaring
- Hypotonia, meningism, full fontanelle
- Weight <4th centile for age (or decreasing on the centile charts)
- Head circumference >95th centile (or increasing on the centile charts)

SYMPTOMS

- Bilious or projectile vomiting, bloody stool
- Fever, lethargy, poor feeding
- Perinatal risk factors for sepsis (premature rupture of membranes, maternal fever or infection, group B streptococcus)

MANAGEMENT

Two treatment modality can be used for the management

of infantile colic i.e.

1) External Management (Bahya Chikitsa) 2) Internal Management (Abhyantara Chikitsa)

1) External Treatment: External Management consists of 4 methods

- Burping
- Exercise
- Abhyanga (Baby Massage)
- Swedana (Sudation)

2) Internal Management: Internal management consists of 2 phases

- Treatment to the child
- Treatment to the mother/wet nurse

1) External Management:

a) Burping: This method is done to help a baby let out air from the stomach especially by patting or rubbing the baby's back. While feeding baby gulps air along with milk which causes bloating of the baby's abdomen and spasms in intestine. This causes pain; hence to relieve the pain, the accumulated air should be let out of the gut.

b) Exercise: It is obvious that a baby cannot exercise by itself, hence the care-giver or doctor must perform exercise on the baby one of which is modified Pavanamuktasana- The name comes from the Sanskrit words Pavan meaning "wind", Mukta meaning "relieve" and asana meaning "posture" or "seat" both the legs of the baby must be held straight at first and then flexed from the knee, in this flexed position the thighs should be pressed against the abdomen. This manoeuvre creates pressure on the abdomen which aids in releasing the accumulated air via the anal orifice which helps in alleviating the pain.

c) Abhyanga (Baby Massage): Soft touch and pressure massage should be given to the infant especially on the abdomen and back with slightly heated oils⁶.

d) Swedana (Sudation): Swedana or Sudation can be performed on a baby in 3 methods i.e. Hastasweda, Pata sweda and Lepana. Hasta Sweda: this type of Sweda is specifically indicated in colic⁷

e) Patasweda: Swedana is done with a heated cloth. A thick cloth should be taken, heated and placed on the baby's abdomen for getting the Sweda effect.

f) Lepana(Pradeha): Fine powder of dry drugs with Usna Veerya such as Hingu, Vacha, Rasna, etc should be made into a fine sticky paste by mixing water or medicated decoction such as Dashamoola Kashaya, and a thick layer of this paste of about 2-3mm should be smeared on the baby's abdomen.

2) Internal Management

a) Treatment to the baby: Exclusive breast feeding is advised to the baby until 6 months of age, even Ayurveda has the same ideology and thus babies of 0-6months of age are called 'Ksheerapa' (exclusively breast fed), hence one should be very careful when it comes to administering anything other than breast milk, even medicines.

i). Drugs with Deepana, Pachana and Anuloma effect are mainly chosen for internal administration in Udarashoola. Drugs like Ajamoda, Shunthi, Jeeraka,

Vacha, Shatapushpa, Hingu are used in mainly Arka form. Other Kalpanas can also be used such as Churna, Kalka, Avaleha, Kashaya, Phanta and Asavarishta.

ii). Drugs can also be administered by applying as a Lepa externally on the mother's nipple before suckling.

b) Treatment to the mother/ wet nurse: Treatment to the mother or wet nurse should only be given after an accurate diagnosis of infantile colic has been made. Similar mode of treatment has to be followed which was used as internal administration in the baby but in higher doses. Draksharishta, Drakshadi kashaya, Jeerakarishtha, Dashamoolarishta and Haritaki Khanda can be used with an aim of Amapachana, Agnideepana, Vatanulomana, Stanyashodhana Shatavari Lehya/ Guda can be used for

Stanyavardhana/Janana effect. Some external treatments can also be given such as application of Lepa on the breast using drugs mentioned in Stanyashodhana Dashemani, Shodhana can also be opted but as a last option.

CONCLUSION

Infantile colic is common problem in pediatrics. Etiology considers by Ayurveda is Stanya Dushti of mother. General advice and counseling should be offered to all families first. Correction of Stanya Dushti with Shodhana Dravyas and maintaining Pathyapalana to mother prevents colic to the child. The medicine given to the child should contain Deepana Pachana properties for Samprapti Vighatana of the disease.

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