

CASE STUDY OF AVARTANI ARKA IN UDARSHOOL (INFANTILE COLIC) IN
KSHEERAPAVASTHA. A CASE STUDYDr. Varsha Deshmukh*¹ and Dr. Rahul Pawade²^{1&2} Assistant Professor, Department of Kaumarbhritya, Bhimashankar Ayurved College, Maharashtra, Pune.

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Article Received on 07/12/2024

Article Revised on 28/12/2024

Article Accepted on 17/01/2025

ABSTRACT

Infantile period is a very tender but superb stage of human life. At least 40% of the Infants crying because of abdominal pain during 0 - 3 months. Nearly about 10%-20% of infants aged 3-12 months were consult for excessive cry because of abdominal pain. (*World J Gastroenterol.2008 Aug7; 14(29):4662-4666. (1).Udarshool in Ksheerapavastha* is described in Kashyap Samhita which shows symptoms like, *Stanamvyudasyate* (Refusal of feed), *Rauti* (Excessive crying), *Udarstabdhata* (Abdominal distension), *Mukhasweda* (Sweating over face), *Shaityam* (Cold extremities). Infantile colic is similar clinical condition told in the Modern science and its exact cause is unknown but it may cause due to immaturity of digestive system and a still developing Nervous system. Here for this research work *Aavartani* fruit has been chosen for infantile colic (*udarshool*) because it is very popular herb in many part of India including Maharashtra for *udarshool* and also an important ingredient of *Balghuti*. It has many properties like-*Tridoshaghna*, *Shoolaghna*, *Krimighna* etc. described in *Bhavapraksh Nighantu* and *Priya Nighantu*. Considering the palatability in infantile age planned *Arka Kalpana of Aavartani* fruit as per *Arkaprakash. Aavartani Ark Yoga* is effective in *Udarshool* in *Ksheerapavastha* (Infantile colic) in this case study.

KEYWORDS: Infantile colic, Udarshool, Kshreerapa avastha, Aavartani.

INTRODUCTION

Infantile period is a very tender but superb stage of human life. After birth the infant makes several physiological changes for its independent existence. The coordinated functioning of various systems including digestive system leads to a positive metabolic balance. Adaptive disturbances in digestive system manifest as flatulence, indigestion, colic etc.

Infantile colic is a benign process in which an infant has paroxysms of inconsolable crying for more than three hours per day, more than three days per week, for longer than three weeks.

40% of the infants consult the Pediatrician for excessive cry due to abdominal pain during first 3 months of life and near about 10-12 % of infants aged 3-12 months consult their pediatrician for the same complaints.

The exact cause of infantile colic is unknown, but proposed causes include alterations in fecal micro flora, intolerance to cow's milk protein or lactose intolerance, poor feeding technique, immaturity of digestive system and still developing nervous system leads to infantile colic.

There are many options for abdominal pain in modern science like antispasmodic drugs, carminics etc. which have momentarily effect.

Udarshool in Ayurveda is a huge term which means, abdominal pain due to many reasons. Udarshool in Kshreerapa avastha (infantile age) is described in Vedana adhyay of Kashyapa Samhita, the symptoms of *udarshool* are *Stanamvudasyati* (refusal of breast feeding), *Rodana* (excessive cry), *Udarstabdhata* (abdominal distention), *Mukha sweda* (sweating), *Shaityam* (cold extremities) which has similar features with infantile colic.

There are many single herbs like sowa, ajmoda etc. and formulations with carminicidal effect as well as anti-spasmodic effect mentioned in various ayurvedic texts. In search of a new potent option in infantile colic, *Aavartani* fruit has been chosen. *Aavartani* is a popular herb in many parts of India.

Aavartani is an important ingredient of *Balghuti*. It has properties like *Tridoshaghna*, *Shoolaghna*, and *Krimighna* etc. as described in *Bhavapraksh nighantu*. Considering the palatability in infantile age, *Arka kalpana* has been used.

There is a famous quote in Ayurveda ("यत्र अ कृतीहि तत्र गुणाहा वासंति") "Yatra A krutihi Tatra Gunaaha Vasanti" meaning, if the part of a plant resembles some organs, it is useful in treating disorders of that particular organ.

The fruit of Aavartani fruit are twisted. The fruits gives an imagination about intestine. Hence they are useful in treating intestinal parasite. The fruit are twisted his they are useful in twisting pain of abdomen.

METHODOLOGY

The current study was carried out in accordance with the International Conference of Harmonization's Good Clinical Practices (ICH-GCP) ethical guidelines.

To fulfill the aim and objectives of the study, this work was carried out in the following manner.

CASE STUDY

A three-month-old girl was brought parents to the Bhimashankar Ayurved Hospital, Pune's in Kaumarbhritya Out Patient Department with following symptoms from 10-12 days

1. Excessive and inconsolable crying especially during evening hours. (*Rodana*)
2. Refusal to feed. (*Stana Dwesha*)
3. Distension in the abdomen (*Udara Stabdhatta*)
4. Sweating over face (*Mukhasweda*)
5. Cold Extremities (*Shaitya prachiti*)

History of past illness

No H/O any other major illness or any surgery.

Drug history

No drug history present.

Family history

No history of consanguineous marriage

Birth history

1. Antenatal- Nonspecific
 2. Natal- Full-term normal delivery at the hospital. The baby cried immediately after birth,
- With birth weight- 2.6 kg. No NICU admission, No any

sign & symptoms of hyperbilirubinemia.
Feeding-Exclusively breastfeeding from first feed.

Immunization history

Vaccinations are administered based on age.

General examination

Anthropometry- Height - 56 cm, Weight - 5.4 kg, Head circumference - 40 cm, Chest circumference 32cm, Mid arm circumference-12cm Pulse: 110 per min, Temperature: 96.5° F, RR:32/min

Ahara- only on breast feed (*Ksheerapavastha*)

Systemic examination

RS: A_EB_E clear,

CVS: S₁ S₂ normal, No Murmur

CNS: Conscious, Active.

P/A: Tender with gaseous distension

Sleep- disturbed (Frequent crying episodes)

Urine -7-8 times a day without complaints

Stool - 1-2 times a day without complaints

Development Milestones- Achieved as per age

Diagnosis

Udarshool (Infantile Colic)

Treatment Given

Route if administration- Oral route

Approximate dose decided as per Clerk's Rule- (Weight in Kg/60) × Adult Dose (40 ml as per Arka Prakash)

Dose- 5kg - 6kg= 3ml-4ml in two divided doses per day here, (5.4kg/60) ×40(Adult Dose) = 3.6 ml per day, 1.8 ml per dose

Duration- 7 days

Follow-up- Follow up study was done on 1st, 5th, 7th day

Diagnostic Criteria

Sign & symptoms of *Udarshool* mentioned in Ayurveda classics Kashyap Samhita as *Stana dwesha*, (Refuse to feed), *Rodana* (Excessive cry), *Udara Stabdhatta* (Distension in the abdomen), *Mukhasweda* (sweating over face), *Shaitya prachiti* (Cold extremities)

Subjective criteria for assessment, the result of five symptoms will be kept as the parameter

Lakshan	Score			Day 1	Day 5	Day 7
	0	+1	+2			
1. <i>Stana dwesha</i> (Refuse to feed)	Accept feed easily	Accept feed after reassurance	Refuse to feed	+2	+1	0
2. <i>Rodana</i> (Excessive cry)	No Cry	Cry occasionally	Cry continuously or steadily	+2	+1	0
3. <i>Udara Stabdhatta</i> (Distension in the abdomen)	Soft, No Tenderness	Mild tenderness	Moderate to severe tenderness	+1	+1	0
4. <i>Mukhasweda</i> (sweating over face)	No sweating	Mild sweating	Moderate sweating	+1	0	0
5. <i>Shaitya prachiti</i> (Cold extremities)	Normal extremities	Mild cold extremities	Mod to severe cold extremities	+1	+1	0

Drug Review

Dravya name-Aavartani

Latin Name- *Helicteres isora* Linn.

Family- Sterculiaceae

Classification (Gana) - Bhavapraksh nighantu:

Guduchyadi Varga, Kaiyadeva nighantu: Aushadhi Varga.

Synonyms- Murwa, Aavartani, Aavartamala

English Name- Indian screw tree/ East Indian Screw tree, Deer's Horn

Hindi Name- Marodphali, Marorphali, Aithanni, Gomathi

Part Uses- Phal, Root, and Stembark

Marathi Name- Murudsheng, Kevan

Rasa- Kashaya

Guna- Laghu, Snigdha, Sheeta

Virya- Sheeta

Vipaka- Katu

Doshaghanta- Tridoshaghna, Kriminashak

Rogaghnata- Atisara, Pravahika, Udarshoola, Kriminashak

Karma- Stambhana, Vranaropaka, Shoolhar, Prashamana, Krimighana

Chemical composition- Diosgenin, Cucurbitacin B, Isorin, Isocucurbitacin

DISCUSSION**1) Stanya dwesha (Refusal to feed)**

Refusal to feed was seen in the beginning followed by cry i.e. *rodana*, after treatment, *stanya priyata*, *kshudhabodhan* along with normal activities was seen.

2) Udara Stabdhata (Abdominal distention)

Gaseous distention of abdomen was examined by P/A examination. However, after treatment, in P/A examination abdomen was soft, non-tender and also with no distension.

3) Rodana (Cry)

Cry or *Rodana*, initially there was excessive cry in the form of screams or frequent complaints along with moaning, whimpers and occasional complaints, but after the treatment there was no cry, baby was well awake, alert and following proper sleeping patterns.

4) Mukhasweda (sweating over face)

Initially there was *sweda* all over the face due to excessive cry and spasmodic pain in the abdomen. Sweating is actually a natural stress response related to the fight or flight system of the body. After that *rodana* and *Udara Stabdhata* was decreased and sweating over the face gradually less.

5. Shaitya prachiti (Cold extremities)

Sheeta is one of the *guna of vata dosha*, here is mainly *Apana Vayu & vyan vayu dushti*. When there is *vata prakopa*, *sheet guna* also increases and thus leads to cold extremities. After normal function of *Vata dosha* extremities are normal.

Infantile colic is very common benign gastro-intestinal problem occurs predominantly up to 6 months of age. In Ayurvedic literature, *Udarshoola* in infantile age group is mentioned in *Vedana Adhyaya* of *Kashyapa Samhita*. *Udarashoola* is caused predominantly by *Vata dosha*. On the basis of results of medicine, it can be concluded that vitiated *Vata dosha* is subsided, thus giving relief to *udarshoola* for longer duration. The given medicine not only helped in subsiding *udarshoola* but also helped in improving appetite, alertness and activity of the child. For better result proper diet and feeding techniques are also important along with drug therapy. No adverse effect was encountered during this study. So, this drug can be used in routine practice for faster and safe recovery.

CONCLUSION

Aavartani is widely used for curing various disease due to its great therapeutic potential. In the developing countries increased cost of medicine as well as their side effects has become burning public health concern. Infantile colic is very common benign Gastro-intestinal problem occurs predominantly up to 6 months of age. In Ayurvedic literature, *Udarshoola* in infantile age group is mentioned in *Vedana Adhyaya* of *Kashyapa Samhita*. *Udarashoola* is caused predominantly by *Vata dosha*. On the basis of results of medicine, it can be concluded that vitiated *Vata dosha* is subsided, thus giving relief to *udarshoola* for longer duration. The given medicine not only helped in subsiding *udarshoola* but also helped in improving appetite, alertness and activity of the child. For better result proper diet and feeding techniques are also important along with drug therapy. No any adverse effect was encountered during this study. So, this drug can be used in routine practice for faster and safe recovery.

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