MUDHAGARBHA W.S.R. OBSTRUCTED LABOUR AND ITS APPLIED ASPECT

Swati Bala¹*, Kalpna Sharma², Prabhakar Shukla³

¹PG Scholar, ²Professor, & H.O.D, P.G. Department of Prasuti Tantra Evam Stree Roga Rishikul Campus, U.A.U. Haridwar, Uttarakhand, India.
³PG Scholar, P.G. Department of Dravya Guna Vigyan, Rishikul Campus, U.A.U. Haridwar, Uttarakhand, India.

ABSTRACT

Maternal and Infant mortality is still a big problem in Modern scenario. Different complications during preconception, antenatal, intranatal and postnatal period are increasing day by day. Ayurveda has given prime importance to Antenatal and Intranatal care of women and her baby. In spite of good care sometimes labour has unpredictable outcomes, previously normal labour suddenly landed up into abnormal or obstructed labour. In Ayurveda, obstructed labour has unique concepts and is explained under the term Mudhagarbha. Obstructed labour is also a cause of maternal and infant death. In the present article an attempt is made to throw light on the very unique concept of Mudhagarbha described in Ayurveda and its scientific concept.

KEYWORDS: Mudhagarbha, Obstructed Labour.

INTRODUCTION

Childbirth is a blessing to a women given from God. The passage of time caused unprecedented obstacle in the progress of Ayurveda, the oldest and most accurate science of life. The obstacle was relatively more marked in the field of Prasutitantra and Streeroga due to various social, ethical, moral and legal reasons.

Concept of Mudhagarbha described in various Ayurvedic Samhitas is very unique and scientific. Mudhagarbha actually includes all the conditions of obstructed labour described in modern science along with its effective management.

The literal meaning of the word Mudha is derived from dhatu “muh” i.e., to become stupefied, unconscious or swooned, to become bewildered or going in wrong direction and become lazy. Meaning of Mudha is the obstructed movement as given by Bhavamisra and abnormal along with obstructed movement as given by Madhukosa commentary.

Derivation:
Mudakrotipawna: khalumudagarbham (Ma.Ni.64/3, Bha.pr.70/113)
Aggravated Vayu makes the fetus to be disoriented; hence it is called Mudagarbha.

Mudovyasaktagati (Madhukoshavyakha)
Muda= rudhagati
Muda+garbha= rudhagatiagarbha

Definition
Tamevkdachitvividhasamaygaagatamapathyapathaa nuprapatnirasyamanamviguganapansomohitam: (SNi.8/3)²

<table>
<thead>
<tr>
<th>Charaka</th>
<th>Sushruta</th>
<th>Vagabhata</th>
<th>Ma, Bh., Y.R</th>
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<tr>
<td>Not mentioned</td>
<td>The fetus after development coming abnormally, unable to come out even after reaching its passage (pelvis and vagina) and stupefied or swooned due to abnormality of Apanavayu is termed as Murhagarbha</td>
<td>The fetus after development reaching abnormal passage, coming with different presentations, troubled by abnormal Vayu and unconscious or swooned is known as Mudagarbha.</td>
<td>Stupefied Vayu going astray stupefies the fetus.</td>
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The definition given by Sushruta and Vagbhata actually includes almost all the conditions of obstructed labour described today, as explained here under.

1. Vivriddharbha: it includes obstruction caused by generalized over size of the fetus i.e., macrosomia or local over growth of a part of the fetus such as ascites, hydrocephalus or congenital tumours etc.

2. Asamyakagata or Anekada-Pratipannam: “Asamyagayaagatamvilombhagenagatam” (S.Ni.8/3; Dalhana)[4] It includes all the abnormal presentations, abnormal positions, deflexed conditions of fetus in case of normal passage with adequate pelvis and co-operative forces.

3. Abnormality of Apanavayu causing Sanmohana of Garbha: The word Sammohana has been explained by all the commentators as unconsciousness of the fetus. The un-coordinated uterine contractions or inertia of uterus caused by vitiated Apana–vayu preferably the Prasuti-maruta leads to condition like exhaustion and asphyxia making the fetus to be Mohita or stupefied. Samyakaapanavayu karma can be correlated with the maintenance of polarity of uterus promoting the descent of fetus in normal delivery. If Karma of Apanavayu is vitiated the coordination between upper and lower segment of uterus leading to variety of problems:
   a) Uterine inertia
   b) Spastic lower segment etc.

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<tr>
<th>Ahara</th>
<th>Vihara</th>
<th>Vyadhi</th>
<th>Mansika</th>
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<tr>
<td>Ati-rookshabhojna, Katu and Tikta rasa, Kshar Sevna, Upvasa etc.</td>
<td>Gramya-Dharma, Yana- Adhwagamna, Praskhlan, Praptana, Prapeedna, Dhavana, Abhigata, Vishma-Shyna</td>
<td>Atisara, Vaman, Jirna-garbhashatna, Kshutaatiyoga, Pipasaatiyoga</td>
<td>Shoka, Krodha, Asuya, Irshya, Bhaya, Trasa</td>
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Harita opines that use of incompatible diet by the mother, diseases of the fetus and severe headache to the mother cause troubles to the fetus. Due to these troubles or its expulsion in oblique position or due to other reasons the fetus dies and women gets trouble. Sometimes due to shyness or otherwise the Bhaga (vaginal passage or introitus or perineum) gets constricted (spasm) the fetus approaching this constrict the passage becomes Mudhagarbha. (Ha.S.5/3/2/1-3) [7]

Samnaya Lakshan of Mudhagarbha
“Mudha: karotipawan: khalu: mudhagarbhamshoolamchyonijatharaadishhumutrasa ngam” (M.Ni. 64/3, B.P 70/113) [8]

Garbha-mudhatva- Disorientation of fetus
Yoni-shoolla- Pain in vagina

4. Apathya-Pathamanuprapata Anirasyamanam: In this variety of Mudagarbha, even though the Garbha reaches Apathyapatha, after reaching it gets obstructed, probably due to constriction of passage at different levels.

The most probable causes are:
   a) Shronivikara- pelvic inlet or outlet contraction
   b) Yoni samvaranam- cervical dystocia
   c) Bhagasanokha and similar condition-Perineal rigidity.

Samprapti (Su.Ni.8/3) [9]

The fetus getting detached from its bonds, transgressing the uterus, descending from the spaces amongst the liver, spleen and bowels irritates or hyper activates the Kostha, due to this irritation the Apana Vayu getting Mudha or having abnormal movements produces pain in flanks, upper region of urinary bladder and Yoni, tympanitis, retention of urine etc. various diseases followed by death of young fetus due to bleeding per vagina.

   a) Vimuktahandana- deranged from its natural arrangement eg. Universal flexion.
   b) Garbhaashya-atikramana- Transgressing the uterus.
   c) Yakrita-plihasransmana- reaching the space between liver, spleens.

Nidana of Mudhagarbha (Su.Ni.8/3) [6]

Dosha involved – Vatadosha.

Jathara-shoola- Pain in abdomen
Kati-shoola- Pain in back
Mutrasanga- Retention of Urine

According to Sushruta pain in Parshwa, Basti-shirsha, Udar and Yoni, Mutra-sanga (retention of urine), Anaha (Flatulence).

Vishishta Lakshan of Mudhagarbha

Three types of Sanga are mentioned only by Vagbhata and Susruta i.e. [9]
   a) By Shira
   b) By Ansa
   c) By Jaghana

The fetus engages in the pelvic cavity by its head or shoulder or thighs. These abnormalities of vertex, transverse and breech presentations.

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### Doshikalakshan of Mudhagarbha (Ha.S.3/52/1-3)\(^{[10]}\)

**Bheda of Mudhagarbha**\(^{[1]}\)

1. **Kila or samkilaka:** The fetus presents itself abnormally with hands, feet and head upwards. It resembles a wedge and obstructs *Yoni marga*.

2. **Pratikhura:** In this the fetus gets obstructed by its body presenting with head, hands and feet all together. Fetus presents itself laterally or in hyper flexed position.

3. **Bijaka:** Fetus delivers by head along with one hand according to *Sushruta* and according to *Madhava* etc. the fetus delivering with head situated in between both the hands gets obstructed by its remaining body during delivery.

4. **Parigha:** In this position the fetus obstructs the passage just like an iron beam or rod used for shutting the doors.

#### Trividha Sanga

*Vrinda Vaghbata* classified the *Mudhagarbha* under three main categories which resembles with the lie of the fetus described by modern texts. (A.SSha. 4/33)\(^{[12]}\)

- **Nyubja –Cephalic**
- **Tiryaga- Transverse/Oblique**
- **Urdhava- Breech**

### Modern Correlation

<table>
<thead>
<tr>
<th>Sushruta and Vagbata(^{[13,14]})</th>
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<tr>
<td><strong>Dawyum Sakthibhyam- presenting with the both thighs</strong></td>
<td>Footling presentation in incomplete breech</td>
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<tr>
<td>One Sakthiabhugna and Udaya by the other</td>
<td>Incomplete breech with single foot presentation</td>
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<tr>
<td><strong>Abhugnasakthishareere Sphigdesatiryagag-at or presenting with buttocks</strong></td>
<td>Incomplete breech with extension of legs (Kilaka) or complete breech</td>
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<td><strong>Ura, Parshwa, Prithsa- or chest, flanks, back etc. presentations of transverse lie in dorso-posterior and dorso-anterior position (Parigha)</strong></td>
<td>Presentations of transverse lie in dorso-posterior and dorso-anterior position (Parigha)</td>
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<tr>
<td><strong>Antahparswapavrittasira and delivering with one Bhuja or head situated in flanks and delivery with one hand prolapsed in transverse lie or in vertex presentation (Bijaka according to Susruta)</strong></td>
<td>Hand prolapse in transverse lie</td>
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<tr>
<td><strong>Abhugnasira- with both the Bhuja and flexed head with both hands and compound presentation (Bhijka described by Madhava)</strong></td>
<td>Flexed head with both hands</td>
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<tr>
<td><strong>Abhugmadyohastapadashirobhi-or presenting with both hands, legs and head together in exaggerated flexion of transverse lie (Pratikhura)</strong></td>
<td>Compound presentation</td>
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<tr>
<td><strong>Eksakhthiyonimukhamekenpayum</strong></td>
<td>Rupture of lower segment along with perforation of colon or rectum</td>
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<tr>
<td>One foot in <em>Yoni</em> and other in anus</td>
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### According to Madhava Nidana\(^{[15]}\)

| Shiras Avarodha (obstruction by head) | Various deflexed conditions of cephalic presentation. i.e. brow presentation, occipito-posterior presentation or dystocia due to pelvic contraction | |
Gati/Samsthana (Different presentation of Mudhagarbha)
Due to Vayuprakopa, Gati of Mudhagarbha are Asankhya (infinite) according to Sushruta, [16]

Sadhya-Asadhyata [17]
Sadhya: First 6 Gatis of Mudhagarbha
Asadhya: Last 2 Gatis named as Viskambha are Asadhya

Lakshana of Asadhya Mudagarbha

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<tr>
<td>Garbhakosha-prasango, Makkal, Yoni samvriti</td>
<td>Sheetagatrata, Puti-udgara, Akesha, Yoni bhramsha, Yoni samvran, Makkal, Shvasa, Kasa, Bhrama</td>
<td>Putigandha, Shoola, Excessive sleep, Women who sees Agni just like neck of peacock, Swelling in feet and face does not survive</td>
</tr>
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</table>

A) Garbhakosha-prasango-Dalhana has offered two explanations to this word. i.e., over clinging of fetus in the uterus or attachment of fetus in other than its normal place. Sir M.M.William has explained the word Parasanga as cleaving which means split and break also. Rupture of uterus is also seen in case of obstructed labour and is considered one of the serious complication even modernera. So Garbhakosha-aprasanga is considered as rupture uterus. This can occur at any time of delivery or uterus with congenital anomalies such as didelyphs uterus, septate uterus etc. and fibroid uterus which also cause obstruction in labour.

B) Makkal- Dalhana on commentary on verses of sutrasthana has referred as it is accumulation of blood in uterus during labour before delivery or intrapartum hemorrhage but in Nidanasthana pain arising after delivery after the obstruction of Vayu. Adhamalla has very clearly classified Makkal in two i.e. developing during pregnancy and during puerperium. So Makkal is characterized by spasmodic pain of uterus, thus in reference to obstructed labour it denotes either intrapartum hemorrhage associated with severe pain or tetanic or spasmodic contractions.

C) Yonisangarva or Yoni samvriti: Though Suhruta and Vagbata use this term, yet have not detailed the disease. But in Madhukoshavayakhyya explain the Nidana of Yonisangarva. Due to use of dietetics capable of vitiating Vata, excessive coitus and night awakening, the Vayu situated in Yonimarga of pregnant woman getting aggravated contracts the vaginal orifice and this very Vayu also obstructs the aperture of ashaya, troubles the fetus inside the uterus. In this condition due to abnormality of Vayu the spasm of yoni due to this Garbhashyadwara or cervix of uterus refers to severe degree of cervical dystocia in which condition cesarean section is needed.

D) Yonisangartha: In cases of prolapse the labour is often obstructed and very difficult.

E) Yonisanga: Yonisanga refers to the obstruction of fetus in the maternal passage probably due to contracted pelvis. In contracted pelvis also the Mudhagarbha becomes incurable as the delivery has to be accomplished by cesarean section.

Chikitsa of Mudhagarbha
Samanyachikitsasiddhanta: (A.SSha. 4/35) [21]
1. The treatment prescribed for retained placenta- Vatashaman is the principle of treatment for retention of placenta.
2. Mantras prescribed in Atharvaveda.
3. Surgical procedures only done by the surgeons who have seen practical work.

According to Harita with the help of massage the fetus should be delivered. The treatment prescribed by Charka for dead fetus can also be used.

Shastra Karma (Surgical intervention) [22]
A. Pre-operative management
Two different opinions for indication for extraction of live fetus:
Live fetus should not be split or cut, because rending the fetus can kill the mother and destroys itself.

Sushruta has further mentioned that in critical cases of contingency and inevitability the expulsion of fetus must be completed, even by splitting or excising the live fetus to protect the mother.

Once the manual extraction fails the condition becomes dangerous for the mother and fetus both is the opinion of Dalhana.

Varieties of Intervention

When the fetus is placed in abnormal positions should be corrected by different manual techniques by drawing the fetus downwards and delivery is conducted. If manual techniques are failed then Shastrakarma is used.

### Manual Procedures

- Utkarsana (pulling the fetus upwards which has come too much down)
- Apakarsana (dragging the fetus downwards which has moved much upwards)
- Sthanapavartana (rotation or cephalic version)
- Udvartana (pushing the face upwards)
- Peedana (compression or pressure application)
- Rijukarana (straightening)

### Instrumental Procedures

- Uktartana – Cutting
- Bhedana
- Perforation
- Chedna
- Excision
- Darana
- Incision

#### Table 1. Consent of guardian (Adhipati) before surgical intervention (Su.chi.15/3)  
Before extraction of Mudhagarbha the consent of guardian must be obtained explaining that if the surgical interference is not done death is sure and even in surgical procedure there is doubt in success. Indu has explained that by obtaining consent the physician does not get defamed even if a woman dies.

#### Position of woman during extraction of Mudhagarbha

- Once the fetus is dead or medical treatment has failed, the extraction of fetus should be done by keeping the women in supine position with flexed thighs, her hips should be elevated by a keeping a thick pad of clothes.

#### Harita says that the lady should be made to sit over a circular thick pad for the purpose, with extended thighs during extraction of Mudhagarbha.

### 3. Method of insertion of hand:  
The vagina and head should be lubricated with mucinous substance or gum of Dhanwana, Nagvartika, Shalmali and Ghrita. Yoni should be open with the help of Tarjani and middle finger. (H.S.52/17)

Shastra used to extract the Mudhagarbha:

- a. Mandalagra (circular knife or round head knife, decapitating knife)
- b. Angulisatra (finger knife)
- c. Shanku (hook)
- d. Ardhachandra (curved knife)

### 4. Effect of Negligence of dead Mudhagarbha:

The wise physician should not neglect the dead Mudhagarbha even for a moment and start the treatment immediately, because this dead fetus will kill the mother by producing asphyxia in the same way as an animal dies due to asphyxia caused by distension of abdomen due to over-eating.

#### 1. Difficulties during extraction of Mudhagarbha/ Garbhashalya

The extraction of fetus is most difficult in comparison to any other Shalya. Because manipulation or action has to be done without visualizing anything, and amongst the yoni, liver, spleen, bowels and uterus.

#### 2. Contraindication of food before surgical procedure in Mudhagarbha:

The surgery should be done in empty stomach, because in full abdomen there may be difficulty in insertion of instruments or patient may die or Vata Dosha Prakopa. Arunadatta says that, yet wine should be used.

#### 3. Alive fetus should never be split or cut, because due to rending the fetus the mother and dies itself. Once the manual extraction fails the condition becomes dangerous for the mother and fetus both is the opinion of Dalhana. Sushruta has further mentioned that if the disease or condition becomes very serious, the expulsion or delivery of fetus must be completed, one should not neglect the woman lest her condition deteriorates, thus should not waste or cross the limit of short time.

#### B. Pradhan Karma- Method of extraction of the Fetus

- a) After perforating the head (with Mandalagra) and subsequently extracting that flat bones of skull, then surgeon should grasp the chest, axilla, chin with the help of Shankuyantra.

- b) In case of Tiryakaagata. i.e., shoulder presentation. The arm is cut with the help of Mandalagra.
c) In case of obstruction caused by full abdomen, the abdomen should be split or perforated. After perforation the intestine should be protrudes and fetus would be extracted.

d) When the obstruction is due to the fixation of thighs or hips, then hip bones should be split and fetus extracted.

**Pashchata Karma- Post Operative Management**[32]

After extracting the fetus following management should be done-

1) Placenta should be delivered.

2) Then women should be bathed with hot water and massaged with oil and Pichu should be placed in vagina.

3) For suppression of Vayudoshabala tail should be used either in the form of tampon or vaginal irrigation, enema and also with the diet.

4) Above procedure done for 3or 5or 7 days and Asava–Arishtha given for 10 days. All these regime should be followed for at least 4 month.

5) Use of sudation, specially the one who is free from complications.

**Udar-Vipatan In Mudhagarbha**[33]

- According to Susruta, in a woman who has died during labour just like a killed goat, if quivering of abdomen still persists, the abdomen should immediately be opened and fetus extracted.

- Dalhana has explained that the procedure should be done in ninth month and in a woman who has died accidently all of sudden, in the same way goat throttled without much trouble, in such case immediately within two Ghaties or one Muhurta. i.e., 48 minutes the fetus should be extracted by laparotomy or else fetus will die.

- Vangasena also agrees with Dalhana.

- Vagbhhat have mentioned that during delivery of full term fetus if quivering of abdomen over Vastidwara of a dead woman still persists, the fetus should immediately be delivered by laparotomy.

- Indusays that laparotomy should be performed over bladder region.

- Arundutta has explained that if the abdomen of dying woman during first stage of labour excessively quivers near the bladder region, then the expert physician should perform the laparotomy during interval period of quivering and extract the fetus.

**Explanation of Udar-Vipatan**[34]

1. Only nine month or full term fetus should be delivered by laparotomy, because premature fetus even if delivered may not survive.

2. quivering of abdomen is indicative of alive fetus.

3. During first stage of labour fetal head/presenting part remains high up or in false pelvis in majority of cases, it does not descend to pelvic cavity, quivering near bladder region also indicates this very fact.

4. Excessive movement indicates too much uterine contractions and relaxations; extraction of fetus during uterine contraction is very much difficult. Arundutta has advised extraction of fetus situated near urinary bladder, in first satge of labor.

5. Explanation given by Dalhana and Vangasena is more logical, because if the woman dies due to other causes such as toxemia of pregnancy, very prolonged labour or any other complications, the disorder have its impact on the fetus which may not survive even if delivered, however when woman dies an accidental death, the chances of survivality of fetus may increase.

6. Normally fetus dies immediately following death of the mother, hence utility of this description is doubtful, however in rare instances one may deliver a living fetus by laparotomy even after a bit prolong time of woman’s death. Munro Kerr in his operative obstetrics has reported that in one instance an operation performed at least fifteen minutes after the death of the mother resulted in the delivery of a healthy baby.

**CONCLUSION**

**Mudhagarbha** (obstructed labour) is big reason of maternal and infant death in modern scenario which is increasing day by day. Ayurveda has unique concepts and explanations for the management of Mudhagarbha with scientific approach. The concept of Mudhagarbha described in Ayurveda along with its management is very much logical. However, more researches should be encouraged to apply these concepts clinically and to establish it more scientifically in the field of obstetrical care, which reduce the maternal and infant mortality.

**REFERENCES**

1. Dr.Brahmananda Tripathi, Madhavanidanam, Chaukhamba surabharati prakasan, Varanasi 2005, chapter 64/3.


8. Prof.Premvati Tiwari, Ayurvediya Prasuti tantraevam Streeroga, 1st part, Chapter no 8, Page no 490.
15. Dr.Brahmananda Tripathi, Madhavanidanam, Chaukhamba surabharati prakasan, Varanasi 2005, chapter 64/3.
24. Ibid
28. Ibid; Chikitsasthana 15/10, Page No. 93.
32. Ibid; 15/20-28, Page No. 93
34. Prof.Premvati Tiwari, Ayurvediya Prasuti tantraevam Streeroga, 1st part, Chapter no 8, Page no 541.

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*Address for correspondence
Dr. Swati Bala
PG Scholar,
P.G. department of Prasuti Tantra Evam Stree Roga, Rishikul Campus, U.A.U.
Haridwar, Uttarakhand, India.
Email: swathibala52@gmail.com

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