

## Management of Pregnancy with Bad Obstetric History through Ayurveda: A Case report

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### Abstract:

The term bad obstetric history or BOH is applied to mothers in whom a previous poor pregnancy outcome is likely to have a bearing on the prognosis of her present pregnancy. Poor pregnancy outcome may be there in form of recurrent pregnancy loss, stillborn baby or intrauterine death of fetus (IUD) which not only increases the perinatal mortality rate but also results in deterioration of physical as well as psychological health of women. There are number of causes which are responsible like genetic or chromosomal disorders, structural abnormalities, endocrinal dysfunction, infections, immunological factors, maternal diseases like anaemia, preeclampsia etc. Despite of regular antenatal care, investigations and management, sometimes the cause remain unknown for the pregnancy loss. In *Ayurveda*, *Acharya Charaka* mentioned the factors responsible for normal delivery of normally developed full term fetus as *Shukra* (healthy sperm), *Asrig* (healthy ovum), *Atma* (good deeds), *Ashaya* (healthy uterus), *Kala* (appropriate time), diet and mode of life mentioned for pregnant woman in *Ayurveda*. *Ayurveda* provides various drugs possessing *Rasayana*, *Balya*, *Garbhasthapaka*, *Garbhaposhaka*, *Prajasthapaka* and *Shonitaprasadana* properties which helps in continuation of pregnancy, proper growth and development of fetus overcoming all complications and simultaneously maintaining the health of mother. In the present case study, patient with history of 3 abortions and 1 Intrauterine death (IUD) was given *Ayurvedic* medicines to prevent any complications in present pregnancy resulting in delivery of healthy full term baby.

**Keywords:** Stillborn, Intrauterine death, *Atma*, *Rasayana*, *Shonitaprasadana*, *Garbhasthapaka*.

**Introduction:**

The term bad obstetric history (BOH) is applied to a pregnant mother where her present obstetric outcome is likely to be affected adversely by the nature of previous obstetric disaster. In the developing countries, too often the disaster is linked with inadequate or neglected antenatal, intranatal or neonatal care. There are many causes responsible for it, common being endocrine disorders like diabetes mellitus, thyroid disorders, antiphospholipid syndromes, inherited thrombophilias (factor V Leiden mutation, Proteins C and S deficiency, hyperhomocysteinemia), structural abnormalities of the uterus and cervix like septate uterus, cervical incompetence, maternal systemic disease (Systemic Lupus Erythematosus), Rh incompatibility, preeclampsia, anaemia, TORCH infections, previous history of congenital deformity of the baby, chromosomal abnormalities etc. Management is done according to the cause and constant vigilance is required during early as well as later months of pregnancy in such cases. In *Ayurveda* classics, monthwise dietary regimen for the pregnant women is mentioned which if followed helps in normal development of fetus and helps the mother to remain healthy and delivers the child at proper time possessing good health and strength without any complications. Besides this, various types of *Pathya Apathya Ahara* and *Vihara* are mentioned by different *Acharyas* during pregnancy which prevents any complications during pregnancy. *Charaka* clearly mentions that for the full term delivery of matured fetus, normalcy of *Shukra*, *Artava*, *Atmakarma*, *Ashaya*, *Kala* and diet along with mode of life of mother is essential. This refers that abnormality in any of these factors may cause *Garbha Vyapad* or complications during pregnancy or labour. Many formulations are described for the treatment of *Chalitagarbha* in each month of pregnancy by *Sushruta*,<sup>1</sup> *Vagbhata*,<sup>2</sup> *Yogaratanakara*,<sup>3</sup> *Harita*,<sup>4</sup> *Bhavaprakasha*<sup>5</sup> etc.

**Case Report:**

A 24 year old married woman visited the Prasutitantra and Streeroga O.P.D. of I.P.G.T. & R.A., Jamnagar on 15/01/2018, with the complaint of 1 month and 6 days of amenorrhea. Urine pregnancy test was done & found strongly positive. She was a fifth gravida with LMP on 09/12/2017 and EDD on 16/09/2018. She was having 7 years of marital life with BOH (Bad Obstetric History). Obstetric history revealed repeated pregnancy loss for four times. She had the history of three abortions and one IUD (Intra Uterine Death). Among the abortions, first two occurred spontaneously within one year of married life around 2 months of gestational age. Both the times dilatation & evacuation (D & E) were done. Third abortion was an induced one in 19

weeks & 3 days of gestational age, due to the cardiac anomaly of foetus (complete atrioventricular defect & narrow pulmonary artery) detected in the anomaly scan on 19/12/2016. Fourth pregnancy loss was an IUD at 6 months of gestation. Mini labour was induced and she delivered a dead female foetus in the year 2014 vaginally. No obvious cause was detected except she had moderate anemia during that pregnancy. Personal history showed poor appetite with *Mandagni* (less digestive fire). She was also having the history of chewing pan masala routinely. On examination the general condition of the patient was found to be normal, pallor was present in conjunctiva. BP was 120/70 mm of Hg and Pulse 78 bpm. Her BMI was 16.87 Kg/m<sup>2</sup> with height 184 cm and weight 40 kg.

### Investigations

Considering her BOH, she was advised complete rest and foot end elevation. She was strictly instructed to stop chewing pan masala. Along with the folic acid supplement, she was advised to take *Shatavaryadi choorna* (Formulated Compound– Table 1) and *Phalaghrita* 5 ml twice daily at early morning and bed time in empty stomach. Ultrasonography was done after 2 weeks for the viability of foetus which revealed positive cardiac activity.

This protocol was continued till 12 weeks. The patient compliance was good except for the morning sickness & emesis gravidarum. Her vitals were found to be normal during this period except for mild diastolic variations in blood pressure. Her haematological, biochemical & serological investigations were carried out on 23/2/2018 & found that her haemoglobin was 7.3 gm%. Urine routine and microscopy revealed presence of trace albumin and pus cells (22 – 25/HPF). Ultrasonography on 7/3/18 revealed 13 week of gestation with **nuchal fold thickness** in normal range.

After the completion of first trimester, *Shatavaryadi choorna* and *Chandraprabha Vati* in the dose of 2 tablets twice daily in morning & evening after food along with water were given. The iron and calcium supplementation was continued throughout pregnancy from Anganwadi from second trimester onwards.

Table 2

Name of drugs	Latin name	Part used	Ratio	Dose	Frequency and anupana
<i>Shatavari</i>	<i>Asparagus racemosus</i> Willd.	Dried root	1	10 g	In morning & evening, empty stomach with one cup cow's milk
<i>Amalaki</i>	<i>Emblica officinalis</i> Gaertn.	Dried fruit	1		
<i>Guduchi</i>	<i>Tinospora cordifolia</i> Miers.	Dried stem	1		
<i>Bala</i>	<i>Sida cordifolia</i> Linn.	Dried root	1		
<i>Arjuna</i>	<i>Terminalia arjuna</i> (Roxb.)	Dried stem bark	1		
<i>Draksha</i>	<i>Vitis vinifera</i> Linn.	Dried fruit	1		

Patient was advised to report OPD for regular ANC. *Chandraprabha vati* was stopped after two weeks. Anomaly Scan was done on 30/04/2018 and revealed a normal single live intrauterine fetus of average gestational age 20 weeks 4 days with cephalic presentation with adequate amniotic fluid. After the anomaly scan the patient was advised to take *Kashmaryadi Ghrita* (*Kashmari Kutaja Siddha Ghrita*) 10 g twice daily before food along with milk mentioned by *Acharaya Charaka* and *Vagbhata* in *Putraghni*, *Raktayoni*, *Asruja Yonivyapad*.

Ultrasonography was done on 13/07/2018 which revealed 31 week normal foetus with 1.5 kg estimated fetal weight in breech presentation and adequate amniotic fluid. Haematological, biochemical & urine investigations were repeated on 14/07/2018. Haemoglobin level increased to 8.2 gm%. She was referred to Department of Obstetrics & Gynaecology, M.P. Shah Medical College for the management of anaemia. USG was repeated on 17/8/18 and revealed a single live intrauterine foetus of average gestational age 34 weeks and 3 days with cephalic presentation and adequate amniotic fluid. Haematological investigation on 20/8/18 revealed 13.6 g% haemoglobin. Patient continued the pregnancy till term and came to IPD on 3/9/2018 at 4.30 am with the labour pains since 2.00 am. On examination cord prolapse was diagnosed and patient was referred to M. P Shah Hospital for emergency LSCS. There she delivered a healthy full term male baby (2.4 kg) on 03/09/2018 through LSCS without any other complications to mother. Neonate was observed in NICU for one hour and after that handled to the relatives.

### Discussion:

Pregnancy is crucial period for a woman as many physiological changes take place during this period in woman's body. The entire pregnancy period can be divided into 3 trimesters due to the particular changes that take place in each trimester. Pregnancy in a woman having previous history of pregnancy loss is of more importance as in this case. There are many symptoms commonly seen in first trimester of pregnancy like morning sickness, frequency of micturition, breast discomfort, constipation, fatigue. Among various complications associated with pregnancy in first trimester, bleeding due to abortion is the most common complaint. In the present case in

the first trimester after positive urine pregnancy test, *Shatavaryadi choorna* and *Phalaghrita* was given to prevent abortion. *Phalaghrita* is mentioned in our classics by different *Acharayas*. *Acharaya Vagbhata* described that if this *Ghritha* is taken by women during menstruation, she conceives and this *Ghritha* is useful for pregnant women whose children die repeatedly as well as by normal pregnant women. *Bhavaprakasha* and *Yogratnakara* told that oral administration of this *Ghritha* is beneficial in women having history of repeated abortions, still births or short lived children. *Phalaghrita* contains *Ghritha* as a major ingredient which is *Tridoshaghna* due to its properties. Moreover it contains mainly *Tikta*, *Madhura* and *Katu Rasa*; *Laghu*, *Snigdha Guna*; *Katu* and *Madhura Vipaka* and also *Ushna* and *Sheeta Virya*. It has *Deepana*, *Pachana*, *Anulomana*, *Shothhara*, *Krimighna*, *Balya*, *Prajasthapana* actions which helps in combating the problems of constipation, morning sickness, fatigue and abortion during first trimester. *Bala* possess *Rasayana*, *Garbhaposhaka*, *Balya*, *Pushtidayaka*. *Prajasthapaka* action which maintains and supports the pregnancy. *Vata Shamaka* property of *Bala* controls the *Apana Vata* and thus prevents abortion. *Arjuna* possesses *Sandhanakara* action which normalizes the uterine musculature and *Shonita Prasadana* property which may increase the blood supply of uterus necessary for proper placenta formation. *Guduchi* possess *Chhardinigrhana*, *Deepana*, *Pachana*, *Anulomana*, *Krimighna*, *Sangrahi*, *Hridya*, *Balya*, *Rasayana* properties. *Bala*, *Arjuna* and *Guduchi* are having antistress, adaptogenic, antioxidant and free-radical scavenging properties which decreases cellular sensitivity to stress. They are protective against other general stressors such as oxidative stress.

Second trimester of pregnancy may be complicated with problems like anaemia, gestational diabetes, IUGR, oligohydramnios, pregnancy induced hypertension, premature contractions. By the time woman enters the second trimester, placenta formation is completed and *Garbha* gains stability (*Sthirata*) in 4<sup>th</sup> month and *Mamsa*, *Rakta* and *Bala Varna Upchaya* occurs in 5<sup>th</sup> and 6<sup>th</sup> months of pregnancy respectively. In this case, *Shatavaryadi Churna* (*Anubhuta Yoga*) was given in second trimester while stopping the medicines given in first trimester. In addition to *Bala*, *Arjuna*, *Guduchi* as previously mentioned *Churna* contains *Amalaki*, *Draksha* and *Shatavari*. *Shatavari* and *Bala* possess *Rasayana*, *Garbhaposhaka*, *Balya*, *Pushtidayaka* action which maintains and supports the pregnancy, helps in providing the proper nutrition to the developing fetus. *Vata Shamaka* property of *Bala* controls the *Apana Vata* and subside the premature contraction. *Prajasthapana*, *Ojovardhaka* properties prevents premature labour and stabilizes the *Ojas*. *Arjuna* possesses *Sandhanakara* action which normalizes the uterine musculature and *Shonita Prasadana* property which may increase the blood supply of uterus thus improving uteroplacental blood circulation, preventing the conditions like IUGR and oligohydramnios and hence fetal distress. Further, *Shatavarin 1*, a glycoside isolated from the roots of *Shatavari* was found to be responsible for the competitive block of oxytocin induced contraction of rat, guinea pig and abbis uteri, *in vitro* as well as *in vivo* thus helping in preventing premature contractions and hence preterm labour.<sup>6</sup> *Amalaki* possess *Balya*, *Rochana*, *Deepana*, *Anulomana*, *Stambhana*, *Hridya*, *Shonitasthapana*, *Garbhasthapana*, *Rasayana* properties. It is also a rich source of Vitamin C which helps in absorption of iron essential after first trimester of pregnancy. *Draksha* also has *Anulomana*, *Hridya*, *Raktaprasadana*, *Garbhasthapana*, *Jivaniya*, *Balya*, *Brinhana*, *Sandhanakaraka* properties.

After completion of 20 weeks of pregnancy, along with this powder *Kashmaryadi Ghritha* was

given to patient which was mentioned by *Acharya Charaka* and *Vagbhata* in context of *Putraghni*, *Raktayoni* and *Asrija Yonivyapad*. *Gambhari* fruit is *Tridoshashamaka* mainly *Vatapittashamaka* and indicated in *Vatavikara*, *Garbhapata*. It acts by its *Garbhasthapaka*, *Rasayana*, *Brinhana* and *Raktarodhaka* properties. *Kutaja* acts by its *Raktastambhaka* and *Samgrahi* properties.

**Table 3:** Properties and pharmacological action of the drugs

Drugs	Properties	Pharmacological action
<i>Shatavari</i>	<i>Rasayana, Garbhaposhaka, Balya, Pushtidayaka, Medhya, Vata Shamaka, Ojo Vardhaka, Prajasthapana, Brumhana,</i>	Antioxidant, Antistress, Adaptogenic, Antioxytotic,
	<i>Balya, Agnivardhaka, Vedanasthapana, Mutrajanana Vayasthapana</i> <sup>7,8</sup>	Antispasmodic, Antibacterial <sup>9</sup>
<i>Bala</i>	<i>Vata Shamaka, Rasayana, Ojo Vardhaka, Prajasthapana, Brumhana, Balya, Anulomana, Hridhya</i> <sup>10,11</sup>	Adaptogen, Analgesic, Anti-Inflammatory, Antioxidant, Cardiotonic, Diuretic, Immunomodulatory, Anticandidal, Antistress, Radical scavenging activity <sup>12</sup>
<i>Arjuna</i>	<i>Hridya, Sandhanakara, Shonita Prasadana</i> <sup>13,14</sup>	Antioxidative, Antibacterial Antiviral, Free radical scavenging, Diuretic <sup>15</sup>
<i>Guduchi</i>	<i>Chhardinigrhana, Deepana, Pachana, Anulomana, Krimighna, Raktavardhaka, Sangrahi, Hridya, Balya, Rasayana</i> <sup>16</sup>	Antibacterial, Antimicrobial, Antistress, Adaptogenic, Antioxidant <sup>17</sup>
<i>Amalaki</i>	<i>Pittashamaka, Balya, Rochana, Deepana, Anulomana, Stambhana, Hridya, Shonitasthapana, Garbhasthapana, Rasayana</i> <sup>18</sup>	Antimicrobial, Antioxidant, Antibacterial, Antifungal <sup>19</sup>
<i>Draksha</i>	<i>Vatapittashamaka, Saumanasyajanana, Anulomana, Hridya, Raktaprasadana, Raktapittashamaka, Garbhasthapana, Jivaniya, Balya, Brinhana, Sandhanakaraka.</i> <sup>20</sup>	Antibacterial, Antifungal, Antioxidant. <sup>21</sup>
<i>Phalaghrita</i>	<i>Tridoshaghna, Deepana, Pachana, Anulomana, Shothhara, Krimighna, Balya, Prajasthapana</i>	
<i>Kashmaryadi Ghrita</i>	<i>Vatapittashamaka, Garbhasthapaka, Rasyana, Brinhana, Raktastambhaka, Samgrahi</i>	

**Conclusion:**

In *Ayurveda*, importance is not only given to the treatment after being pregnant but before conception, whole regimen is mentioned to prevent any obstetrical complications in the future pregnancy to both mother and baby. In the present case study, patient came with bad obstetric history and pregnancy so *Ayurvedic* treatment was given which was found very effective in patient with bad obstetric history. Most of the drugs given were *Garbhasthapaka*, *Prajasthapaka*, *Rasayana*, *Balya* and *Raktaprasadana* which not only helps in preventing abortion but also helps in normal growth and development of fetus by increasing the uteroplacental circulation thus preventing the preterm delivery or IUGR cases.

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