

ROLE OF AYURVEDA TO REDUCE NEED OF CESAREAN SECTION

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ABSTRACT

Cesarean section is a life saving surgical intervention in complicated cases both for mother and fetus. But it is important to ensure that it is provided to women in need. Unethical Cesarean deliveries not only lead to health complications but also exert financial burden on patients. Ayurveda, the healthy way of living has plentiful of guidelines that ensures safe motherhood and healthy newborn. By adopting the pre conceptional and antenatal regimen mentioned in Ayurveda the rate of need of CS and its associated complications can be markedly reduced. The current piece of work focuses on role of Ayurveda to reduce the need of of Cesarean sections.

KEYWORDS: Cesarean Section, Ayurveda, Antenatal care, Garbhini Paricharya, Pre conceptional regimen.

INTRODUCTION

Proportion of Cesarean section to the total births is considered as one of the important indicators of emergency obstetric care. A figure below 5 per cent implies that a substantial proportion of women do not have access to surgical obstetric care; on the other hand a rate higher than 15 per cent indicates over utilization of the procedure for other than life saving reasons (WHO, 1985; WHO, 1993). The C-section rates are skyrocketed in private setups as compared to government institutes. In 2005, WHO proposed the use of Robson classification as a global standard for assessing, monitoring and comparing Cesarean section rates both

within health care facilities and among multiple institutes. In response to the growing concerns and alarming statistics; Ayurveda is a ray of hope that offers the principles and guidelines to achieve a normal and healthy pregnancy resulting in an uneventful uncomplicated labour. Along with the general risks involved in any surgical intervention like infection, hemorrhage, injury to organs, adhesions, extended hospital stay and extended recovery time etc; there are many other deleterious health hazards like-

MATERNAL RISKS

1. It increases the risk of maternal deaths (3-4 times that of a vaginal birth)
2. Between 20 – 40% of women suffer postpartum complications (mainly PPH and Infections)^[1]
3. Exposure to antibiotics and their side effects is 5 times more.
4. There are increased chances of future ectopic pregnancy.^[2]
5. Chances of failure or difficulty in lactation are more.

Fetal Risks

1. There is increased risk of respiratory distress and temperature regulation.
2. Studies have shown alteration in the gut flora. Babies born by cesarean section have altered fecal microbes as compared to vaginally born babies.^[3] As 70% of our immune function comes from gut therefore these alterations in intestinal microbes has a huge impact on the overall immune health of newborns.
3. Chances of Bronchial asthma and allergies increase. (It may be due to the fact that there is suppression of regulatory T-cells, which regulate the development and functioning of immune system^[4])
4. There is increased risk of obesity later in life. (Cesarean born babies are 15% more likely to become obese in the adolescence and adult age)
5. Also Cesarean born babies are likely to have low APGAR score and risk of seizures is more.^[5]

ROLE OF AYURVEDA IN AVOIDING CESAREAN SECTIONS

A old proverb ” an ounce of prevention is worth a pound of cure “ seems to be best and well suited in explaining the role of Ayurveda in avoiding C-sections. It is very necessary to take all the preventive and precautionary measures well in advance even before conception.

Preconceptional Counseling and Regimen: Pre conceptional care mentioned in Ayurveda has a great contribution in getting the healthy progeny. It should be considered as first step in

optimizing pregnancy outcomes. Ayurveda has scattered references about it like couple's marriageable age, age for conception and criteria for bridal selection etc. The principals mentioned in Vajikarana enable a couple to achieve a healthy offspring with normal outcome. About six months prior to conception; the couple should be prescribed a personalized purification and rejuvenation regimen to ensure optimal quality and quantity of both ovum and sperms. The couple should be purified by the use of oleation, sudatory measures, emetics, purgatives and brought to normal condition by appropriate dietetics. This should be followed by Asthapana Basti and Anuvasana Bati.^[6] Male is advised to take Ghrita and milk rich diet medicated with the drugs of madhura varga where as for female Taila and Masha is indicated.^[7]

The goal is to ensure that parents are as healthy as possible before conception to promote the health of their future children.

Analysis of basic factors (Ritu, Kshetra, Ambu, Bija)

Ayurveda compares human conception to the germination and sprouting of a seed and its transformation to a plant. For healthy growth of a plant four factors namely Bija (healthy seed), Kshetra (Proper soil), Ritu (Suitable time conducive to growth) and Ambu (Water) is essential. In the same way, Bija (healthy sperm and ovum), Kshetra (disease free reproductive organs mainly uterus), Ritu (Ovulation and appropriate maternal age) and Ambu (Nourishing secretions) are mandatory for ideal conception.

Ritu or Kala can be understood as Vaya or Ritukala. Advanced maternal age (AMA) is usually defined as a mother who is 35 years of age or older at delivery. In both elderly primiparous and multiparous women; chances of Cesarean section increase markedly.^[8] There is also increased risk of obstetric blood loss with advanced maternal age. The decrease in myometrial contractility and reduced effect of oxytocin in older mothers could play a role. Furthermore, older mothers have increased risk of premature rupture of membranes, dystocia^[9] and fetal distress.^[10] Bija A healthy seed bears healthy fruit. If the sperm and ovum are healthy the the progeny is likely to inherit a healthy gene and immunity.

Proper Antenatal care (Garbhini Paricharya)

By following the normal dietetics and mode of life mentioned in classics, a healthy and non interventional outcome can be achieved. Being indifferent or negligent during antenatal

period may end to the costly cure. The pregnant woman should use desired congenial diet and proper mode of life and should avoid factors likely to harm the fetus.^[11]

Massage by Lakshadi Tailam^[12] is indicated in pregnancy for development of fetus. Hence its use may avoid the conditions like IUGR and SGA etc.

According to Acharya Sushruta, a safe bed and resting position is advocated. According to him the sleeping and sitting place should be covered with soft cushion or mattress and it should not be too high. The bed should possess elevated upper portion for bed rest and should be perfect and very comfortable.^[13] This may avoid the accidental falls. Although, the walls of uterus are thick and the amniotic fluid also serves as a cushion but the falls during the late second trimester and early third trimester might be harmful to both mother and baby, especially if there is direct trauma to abdomen. As the trauma may lead to initiation of contractions, the loss of amniotic fluid, the separation of the placenta from the inner wall of the uterus (Abruptio Placenta) or the passage of fetal blood cells into the maternal circulation (fetomaternal hemorrhage). All these conditions may lead to surgical intervention, hence increasing the incidence of Cesarean sections.

Acharya Kashyapa has advocated the abode to be well fumigated and should be free from insects like mosquitoes etc. Vedic hymns recitation and instruments should be played by Brahmanas.^[14]

Numerous effects of listening to music were reported, such as pain relief during contractions, reduced tension and fear, "adaptation" of women to the hospital, stimulus to prayer and spirituality. These conditions enabled the parturient women to experience a more efficacious state of relaxation in the intervals between contractions, encouraging a milder and eutocic labor and raising the women's limits of tolerance for pain and discomfort.^[15] External sound vibrations are reproduced inside the human body leading to changes not very well clarified so far. It is important to keep in mind that the fetus has hearing abilities from about the 4th or 5th month and, in addition to being able to pick up sound vibrations through hearing, the fetus also receives vibrations from the mother's body.^[16]

Regimen and Precautions During Ninth Month

Sutikagaara (Accouchment Ward) - Acharya Charaka and Sushruta, a pregnant female should enter the labour ward as the ninth month start. The entry should be in the favorable

nakshatras and the female should remain busy in auspicious virtues.^[17] The probable benefit may be to isolate the lady from people in order to protect her from communicable diseases. So, the stay in labour ward may prevent the contact of infections since the pregnant woman will be segregated, besides it may also prepare woman psychologically to withstand the labour pains. Though in the present era, it seems not to be possible to follow this in the starting of ninth month but restricted contact with too many persons may be followed.

Passionate and experienced Birth Attendants

Stress and anxiety during pregnancy especially in the last trimester may lead to restlessness, panic attacks, increased pain perception and fetal distress. Getting proper psychological support and developing coping mechanisms can help transform a time of stress and anxiety. In Ayurveda multiparous women, possessing strong character, experienced in conducting the labour, with affectionate nature, free from grief, having good endurance and capable of making parturient woman happy should be present in the labour ward. Gaining support and assurance from the experienced persons and talk with qualified counselor helps to reduce the panic based reactions.

Basti Therapy during pregnancy

Acharya Charaka and Vagbhata have advised use of Anuvasana Basti with oil along with vaginal tampon prepared with the drugs of Madhura group in ninth month of pregnancy^[18-19], where as Acharya Sushruta has indicated the Asthapana basti with the decoction of Badri mixed with bala, atibala, satpushpa, palala, milk, curd, mastu, oil, salt, madanphala, honey and ghrita in eighth month followed by Anuvasana basti. It is prescribed so to clear the retained feces and for Vatanulomana^[20] (regulation or putting the Vata in right direction). Due to movement of Vayu in right direction, labour commences without any difficulty and remains free from complications.

Probable mode of action

Anuvasan basti (enema of medicated oil) is said to be prime most treatment for vata dosha(vayu). It helps in maintaining equilibrium of vata and thus prevents its vitiation due to unctuousness, dhatu samya and vata prashamana(pacification) properties. According to Ayurveda Apana Vayu governs all the process of labour. The normal sthana of Apana vayu is pelvic area and that of Vata dosha is pakvashaya (intestinal area infra umbilical area). The organs and structures that are involved during labour mechanism lie in the same vicinity of Apan vayu. The normal direction of Apana is anuloma (downward direction) which is a

must for a normal vaginal delivery. Additionally the power of uterine contractions also depends upon normal apana and vyaan vayu. Apana vayu is also responsible for Vertex presentation as it is mentioned that at the onset of labour the foetus get turned and comes forward due to action of Prasooti Maruta and then is expelled out through apathyapath this is termed as normal labour.^[21] If Apana is vitiated it can cause abnormal presentations, preterm delivery and also obstructed and prolonged labour. Various research works indicate that Basti therapy given during last months of pregnancy provided strength to the patients to undergo the stressful labour process and have an uncomplicated intra as well as postpartum period. It was observed that there were optimum uterine contractions and relaxation in trial group patients and no inertia or prolonged labour was noted.^[22]

Probable action of pichu (vaginal tampon)

Yoni pichu if used as per recommendations of Ayurvedic texts may result in local lubrication which accelerated fetal expulsion and cut short the second stage of labour. By its snighdhata(oleation) stretching capacity of perineum increases and thus prevents tear or lacerations. It is also known to improve the cervical dilatation, effacement and ripening of cervix.

SUKHPRASAVKAR YOGAS

Many formulations have been mentioned in Ayurvedic classics to potentiate labor pains and to deliver the baby in obstructed or delayed labor. Primarily these references are found in Yoga Ratnakara and Bhaishajya Ratnawali as.

Treatment of Garbha Sanga or Delayed Labor

Many drugs are prescribed in Yoga Ratnakara^[23] and Bhaishajya Ratnawali for the “delay in labor”

1. Fumigation with slough of black snake or Pinditaka(Madanphala)
2. Anointment of pestled root of Potaki with Tila Taila inside the vagina
3. Root of Hiranyapushpi, Suvarchala and Vishalya should be tied over arms or legs
4. Roots of Ikshu or Tala knotted in a thread measuring to the length of the woman should be tied to waist.
5. Root of Pratyakapushpa, Paribhadra or Kakjangha should be tied to waist.
6. Anointment of Krishna and Vacha pestled with water and mixed with castor oil over umbilicus.

Sukhprasavkar yogas- has been mentioned in Bhaisajya ratnavali. Matulung mula churna and madhuyasti mula churna administered with anupaan of madhu and Ghrita results in easy labor without any delay.

Probable mode of action according to previous researches is- These measures have a favorable effect on ripening of cervix and have oxytocin like effect. Hence it is effective in maintaining the pattern of uterine contractions required for progression of labor. These yogas also help to reduce the intensity of pain felt by pregnant women during the course of labor and this effect might be due to counter irritant effect of certain ingredients of herbal paste as well as due to antispasmodic activity of ingredients which causes good relaxation of uterus in between the contractions.

Sukumara Ghrita: Mentioned in Sahasra Yoga^[24] also has promising results in achieving non complicating labor outcome.

Prenatal Yoga: Various breathing techniques, gentle stretching and easy Yogic Aasanas (postures) during pregnancy specially during last trimester strengthen the balance and increase the flexibility of the pelvic floor.

Summary

Cesarean section is a mandatory surgical intervention that resolves labor that has medical complications and hence helps to save the lives of mother and baby due to an emergency during labor. But now a days these surgeries are being performed too frequently and sometimes for preventable reasons and has exceeded the tolerable limit specified by WHO.

Owing to its hazards, Ayurveda is a big hope as it offers a healthy regimen that has to be followed prior to conception. As it reduces both maternal and fetal complications, so helps to avoid Cesarean Sections. It is not a single Ayurvedic regimen or guideline, but a combination of treatment recommendations and therapies which will solve the purpose. Although a judicious approach is needed for decision making for C-sections as wrong case selection may result in both maternal and perinatal mortality or morbidity.

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