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#### "Lotus Birth" - A Bird View

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#### **ABSTRACT**

Delivery is the process of denouement of a pregnancy where fetus leaves the mother's womb by vaginal passage called as labour or through abdominal route named as Caesarean section. During pregnancy the connection between the mother and the unborn baby is established through the placenta and the umbilical cord. The placenta helps for exchange of nutritive, circulatory and metabolic activities between mother and the fetus through the umbilical cord. Thus acts as a bond between fetus and the mother. After the delivery of the baby, the umbilical cord is cut and the baby will be separated from the mother's body & then the placenta is expelled out from the uterus. The umbilical stump will take few days after delivery to dry and fall off. "Lotus birth" is a slight deviation from this process. Lotus birth is where the delivery of fetus and the placenta are carried out without cutting the umbilical cord, thus allowing the natural detachment of cord from umbilicus after drying. This paper is a compilation and analysis of differentiable process of delivery.

#### **KEYWORDS**

Delivery, Cord Clamping, Placenta, Umbilical Cord, Lotus Birth



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#### INTRODUCTION

The baby is delivered out from mother's uterus at the end of pregnancy. Immediately after the birth of baby, the cord is clamped with all aseptic precautions by placing two Kocher's forceps. The forceps which is nearer to the navel region is placed in a distance of 5cm and cord is cut in between 2 forceps. Later the umbilical cord clamp is placed near the belly button and the extra cord is excised to leave back the stump. To facilitate transfer up to 100ml of blood back to baby from compressed placenta, the cord clamping can done after stoppage of cord pulsation or can be delayed for 2-3 min in a mature baby. This delayed cord clamping should be avoided in preterm baby or low birth weight baby as it causes hypervolaemia. But the cord clamping can be delayed in Preterm babies if they doesn't require any positive pressure ventilation. Early clamping is encouraged in cases of asphyxiated babies, Rh incompatibility which prevents antibody transfer from mother to baby, and babies with diabetic mother<sup>1</sup>. Delayed umbilical cord clamping is advocated as it improves the health status and nutritional outcome of the neonate. It helps to prevent PPH, even with HIV mother (both should receive antiretroviral  $drugs)^{2}$ 

The routine practice is recommended by organizations worldwide. health The ACOG recommends a delayed umbilical cord clamping in matured full term and in preterm babies for minimum of 30-60 seconds after birth. The ACOG states that: "Delayed umbilical cord clamping is associated with significant neonatal benefits in preterm infants, including improved transitional circulation, better establishment of red blood cell volume, decreased need for blood transfusion, and lower incidence of necrotizing enterocolitis and intraventricular hemorrhage<sup>14</sup>." Along with ACOG, the American College of Midwives recommends cord clamping at least after 2-5 minutes. The WHO also recommends the delayed cord clamping for about 1-3min after birth with simultaneous resuscitation"<sup>3</sup>.

The extreme level of this delayed cord clamping may be "Lotus birth" which is practiced in few of the foreign countries.

#### What is Lotus birth?

Lotus birth is the unique practice of delivery of the baby with placenta and leaving them attached till the cord dries and falls off by its own. It is also called as umbilical nonseverance, which is likely to take 3 to 10 days for attached cord to dry and fall, but varies depending on weather and humidity levels of that area.



Lotus birth name is derived after the lotus flower, a flower which symbolises the unity, rebirth and detachment in Eastern cultures. Lotus births rare variation in childbirth procedure commonly seen in cultures of foreign like Southern Africa and Bali. Some historical evidences of lotus births are seen in Europe at around middle ages. The records of lotus birth, the delivery of fetus with attached placenta is seen in the American mainland even in the pioneer days. In Western Countries, lotus birth seems is a new birth drift influenced by early tradition<sup>3</sup>.

#### Procedure<sup>3</sup>:

- 1. After the childbirth, wait for the separation and delivery of the placenta naturally without clamping and cutting the umbilical cord.
- 2. After assuring the stoppage of pulsation of the cord, the placenta is usually cleansed with warm water and deliberately dried with soft, absorbent organic cloth. Left for about 24hours to drain completely.
- 3. The placenta needs at most care and good maintenance to prevent the infection. The placenta can be kept in a pot or basket covering it with sea salt or rosemary seeds in sufficient quantity as and when needed. A clean bag or a cloth diaper can also be used to store the placenta but the bag is changed and cleaned on daily basis.

4. Baby is to be covered with loose clothing to minimize the risk of pulling effect of the cord from tummy button and to facilitate air circulation until the cord along with the placenta falls from the navel naturally.

#### Benefits of Lotus Birth<sup>3</sup>

- 1. Excess Blood: Lotus birth facilitate the back flow of oxygenated blood from compressed placenta without disrupting the blood volume. This improves blood circulation, maintains body temperature, improves RBC count, the immune system, and facilitates the brain development.
- 2. Less Risk of Infection: It is achieved as there will not be any cut wound occurring by cord cutting. Dr. Judith W. Leavitt written in her book that, babies in American pioneer were more often delivered with the placenta and the cord attached to lessen the risk of infection due to cord cutting and to decrease the infant mortality rates.
- 3. **Fast Healing of the Naval:** Mary Ceallaigh, a lotus birth educator told in New York Post that lotus birth babies will have perfect belly buttons i.e a completely healed navel area.
- 4. **Emotional Bonding:** Increases the emotional attachment with mother by giving psychological feeling that the umbilical cord-a bond between the mother and fetus is not cut. .



5. **Postpartum Healing:** The new born when still connected with placenta, a new mother is forced to move slowly, minimally, and carefully. This felicitates the recovery and healing process.

#### Risks of Lotus birth<sup>4</sup>:

There are no much research works to draw a clear risks of this procedure.

After the expulsion of placenta outside the womb, the blood stops flowing to the placenta. Thus the placenta represents a dead tissue which is more vulnerable to infection. This infected placenta in turn affects the baby as the placenta will be still connected to the baby.

When the cord is accidentally pulled off from the naval region, there will be higher risk of injury to the baby's naval, it is known as cord avulsion.

## Light on few research works on Lotus birth:

- 1. In a study conducted in Ann Arbor, USA from April 2014- January 2017, there were 6 lotus births are recorded. Three of them got the umbilical cord cut during the discharge. Other 3 mothers wanted to opt the Lotus baby during next delivery too. No infection or the complications are noted in any of these cases.<sup>5</sup>
- 2. Three Lotus birth cases were observed at Kassel, Germany. The case report was aimed to discuss a distinct way of approach in the 3<sup>rd</sup> stage of labour. The placenta was

rinsed properly, salt and some herbs were put on 2-3hr postpartum. Then the placenta was covered in some moisture absorbing material and the salting was continued depending on the moisture content of the placenta. The natural detachment of the cord was noticed on 6<sup>th</sup> postpartum day without any complications<sup>6</sup>.

- 3. On the 1<sup>st</sup> postpartum life, a neonate with lotus birth ended with Staphylococcus lugdunesis sepsis and endocarditis- a study stated. This case reported a rare pathogen which causes endocarditis in adults and paediatric population caused endocarditis even in a newborn. The researchers hypothesized that the atypical birthing contributed to the occurrence of this infection<sup>7</sup>.
- The neonate born with Lotus birth at Modena, a city in Italy was complicated with neonatal hepatitis. A full term Europid pregnant woman aged 32 years, had a spontaneous home delivery. The umbilical cord left unclamped and cut as per wishes of the couple. Then the placenta was covered in a bag and placed at the same level of neonate. The baby and the mother were healthy after delivery. But the neonatal jaundice was observed after 72 hours of the birth and thus the baby was admitted to a hospital. The umbilical cord cut during admission and the phototherapy was started, the baby was



discharged after the normalcy. Later after 25days baby was readmitted due to complications. There was a hypotheses relationship between Lotus Birth and the onset of clinical symptoms. The baby was suffering persistent jaundice with a high of aspartate presence and alanine aminotransferases without manifestation of cholestasis. Recovery occurred spontaneously after the first months of life. Investigatory reports revealed a special form of hepatitis called as "acute pure cytolytic syndrome" which points towards an acute isolated hepatocyte injury. The clinical findings and investigation data suggest that the cytolysis was due to an infection. But the origin of infection is uncertain.8

The risks of the Lotus birth can be illustrated by the series of cases published by the group of pediatritions of USA published in Clinical paediatrics. In 1st case the baby had water birth at home and found to be hypoglycaemic and with elevated RBC's when brought to hospital. The baby was diagnosed to have blood stream infection and bacterial growth in one of the heart valves. 2<sup>nd</sup> with severe jaundice was associated with Lotus birth. The 3<sup>rd</sup> case developed with omphalitis- an infection of umbilical stump (baby was still attached with the placenta) and surrounding abdominal wall in first two days of life.

Though the mortality rate is high as 15%, the baby had a good outcome<sup>9</sup>.

#### Reference in Ayurveda?

In Ayurveda we find references about the umbilical cord cutting after the delivery, but no references found about the Lotus birth. ततो नाभिनाडीमष्टाङ्ग्लमायम्य सूत्रेणबद्ध्वा छेदयेत, तत्सूत्रैकदेशं च कुमारस्य ग्रीवायां सम्यग् बध्नीयात् | (स् शा 10/12) डल्हण ठीक- 🛘 ततो नाभिनाडीमितिआयम्य ग्रीवायां सम्यग्बध्नीयात् आकृष्य, स्रावपरिहारार्थः गयी त् 'गर्भनाडीमष्टाङगुलमायम्य नातिगाढं नातिशिथिलमग्रे वर्धयित्वा सूत्रेणाबध्य कृष्ठतैलेनसिक्त्वाऽपत्यमाश्वास्य मध्सर्पिर्मिश्रमङ्गुल्याऽनामिकया लेहयेत'- इति पठति७

Sushrutacharya opines that a thread is to be tied in 8 angula distance from the nabhi and is to be cut. The cut end is hung on the neck. Dalhana gives teeka as if it is hung around the neck, it will prevent the oozing from the cut end. The cord should not be tied not too tight or too loose, and is irrigated with the Kusta taila<sup>10</sup>

नाभिबन्धनात् प्रभृत्यष्टाङ्गुलमभिज्ञानं कृत्वा छे दनावकाशस्य द्वयोरन्तरयोःशनैर्गृहीत्वा तीक्ष्णेन रौक्मराजतायसानां छेदनानामन्यतमेनार्धधारेण छेदयेत।



तामग्रे सूत्रेणोपनिबध्य कण्ठेऽस्य शिथिलमवसृजे त्। (च शा ८/४४)

Charakacharya in shareera stana says that the umbilical cord is held with two fingers at 8 angula distance from nabhi and is cut with Ardhadara shastra made up of gold, silver, iron or any other metal. The cut end is tied with a thread and is loosely hung on the neck<sup>11</sup>.

Astangakaras also has same opinion but the distance of the cord to be cut is 4 angulas<sup>12,13</sup>.

## DISCUSSION AND CONCLUSION

Lotus birth is a well differentiable method compared to the regular practice of birthing the baby with clamping and cutting the cord to separate the baby from its attached placenta. This facilitates the baby to terminate the circulation. Lotus birth is also a spiritual practice which honours the bond between the neonate and the placenta. There is no reasonable expectancy from the Lotus birth which is followed by few health seekers of overseas. There are no research works to support the beneficiary claims. The placenta is considered as living tissue as it receives blood supply from the mother, and once the delivery of placenta takes place, the circulation will cut off and it will be no longer living. Thus, the benefits of keeping the baby connected with the placenta are unlikely to produce any benefits. Practitioners of lotus birth assume that the threat of infections may be lowered by this technique of delivery as there will be no physical injury to the umbilical cord. But, it can tend to increase the chances of infection after birth because the placenta is a dead organ with stagnant blood. There's no enough researches conducted to say extent the risk of infection may be with a lotus birth.

A lotus birth might be helpful in an emergency birth situation were immediately reaching to the hospitals are impossible and are waiting for the medical attention. In such conditions shifting the patient with intact placenta and the cord attached to infant to hospitals for further management. That is because cutting the cord without medical assistance can cause haemorrhage and infection.

As there is no strong research on lotus birth to prove its benefits or the risks, it can be avoided in practice. Instead, the delayed cord clamping and cutting can be safely practiced as it provides all the post-birth benefits from the placenta. Though there is a slight increase in the risk of jaundice with retarded umbilical cord clamping, but the risks are considered to under weigh the benefits. The delayed cord clamping has shown to improve haemoglobin levels,



improve iron stores during first few months of delivery, improve red blood cell volume, improve circulation, it decreases the incidence of transfusion of blood and the reduce the evidences of intraventricular haemorrhage and necrotizing enterocolitis. So the Lotus birth beyond the delayed cord clamping is not practiced in India.



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