

The Psychological Perspective of Implantation and the Date of Transmigration of *viññāṇa* to the Womb of a Mother as Depicted in Buddhism

Since the Buddha has divulged the reality of the being by revealing the development of the *viññāṇa* in the womb of a mother, the prenatal development is a subject matter to discuss with Buddhist teachings. According to Aṭṭhakathā, one is not born at once, but it grows gradually in the womb and it can be seen firstly as *kalalam*.¹ Buddhism not being subordinate to the modern psychology introduces the prenatal development of the being. Moreover, the Buddha has clearly stated how *viññāṇa* transmigrates to the womb. This is what the psychologists have yet been unable to reveal even with the modern equipment.

According to psychology there are three stages inside the womb and these stages pass quickly as the organism becomes a **zygote**, then an **embryo**, and finally a **foetus**. The transition from embryo to foetus occurs at 8 weeks, a full month before the pregnant woman enters the second trimester of her pregnancy and, often, before she is aware that she is pregnant. At this point, all of the embryo's major organs are formed. The rest of the prenatal period is a time of growth, developing function, and the refinement of organs and structures that already exist. This means that a woman may pass through the most critical periods of pregnancy before she even knows she is pregnant.²

Prenatal development is often divided into three major phases.

1. The period of the zygote (conception to implantation 10-14 days)
2. The period of the embryo (15 - 56 days)
3. The period of the foetus (57 - until birth)

1. The first phase, called the **period of the zygote**, lasts from conception through implantation, when the developing zygote becomes firmly attached to the wall of the uterus. The period of the zygote normally lasts about 10 to 14 days (Leese, 1994).³

2. The second phase of prenatal development, **the period of the embryo**, lasts from the beginning of the third week through the end of the eighth. This is the time when virtually all the major organs are formed and the heart begins to beat (Corsini, 1994).⁴

¹ S.N.A. I, p.300

na mātukucchismiṃ ekappahāreneva nibbattati, anupubbena pana vaḍḍhati" ti dassento paṭhamam kalalam hotīti ādimāha

² Developmental Psychology: Childhood and Adolescence, David R. Shaffer, Katherine Kipp Cengage Learning, 2009 - p. 119

³ Developmental Psychology: Childhood and Adolescence, David R. Shaffer, Katherine Kipp Cengage Learning, 2009 - p. 120

⁴ Developmental Psychology: Childhood and Adolescence, David R. Shaffer, Katherine Kipp Cengage Learning, 2009 - p. 120

3. The third phase, **the period of the foetus**, lasts from the ninth week of pregnancy until the baby is born. During this phase, all the major organ systems begin to function, and the developing organism grows rapidly (Malas et, al., 2004).⁵

The periods of prenatal development can be seen in the Canon too. Specially, Indaka Sutta states five stages in the prenatal development as *kalala*, *abbhuda*, *pesi*, *ghana* and *pasākhā*. By following the stages respectively within nine or ten months the being is born in the human world.⁶ In *Atthakathā*, the stages are explained one by one.

- Kalala** - It is called *Kalala* which is similar to a drop of oil (coconut oil) and its colour.⁷
- Abbhuda** - It is called '*abbhuda*' which has been growing seven days as *kalala*.⁸
- Pesi** - It is called '*pesi*' which has been growing seven days as *abbhuda*.⁹
- Ghana** - '*Pesi*' that has been grown seven days is called '*ghana*'. It becomes like egg-shaped as a result of *kamma*.¹⁰
- Pasākhā** - At the fifth week, there arise five drops for two hands, two legs and the head.¹¹

According to the facts found in the Canon, the prenatal development from zygote to foetus is fivefold. Furthermore, Indaka sutta finalizes that body hair, nails, etc., would grow in addition to the hair of the head, in the forty second week.¹²

The prenatal development in Buddhism begins with three conditions.¹³ They are:

1. Parents should be sexually united.
2. Mother should be in her period of fertilization.
3. Viññāna should come to the womb.¹⁴

⁵ Developmental Psychology: Childhood and Adolescence, David R. Shaffer, Katherine Kipp Cengage Learning, 2009 - p. 120

⁶ Mahatanhasamkaya sutta; M. I, p.266

tamenā, bhikkhave, mātā nava vā dasa vā māse gabbhaṃ kucchina

⁷ S.N.A. I, p.300

*"tilatelassa yathā bibindu, sappimaṇḍo anāvilo
evaṃ vaṇṇapaṭibhāgaṃ, kalalaṃ sampavuccatī" ti.*

⁸ S.N.A. I, p.300

*"sattāhaṃ kalalaṃ hoti, paripakkaṃ samūhataṃ
vivaṭṭamānaṃ taṃ bhāvaṃ, abbudaṃ nāma jāyati"*

⁹ S.N.A. I, p.300

*"sattāhaṃ abbudaṃ hoti, paripakkaṃ samūhataṃ
vivaṭṭamānaṃ taṃ bhāvaṃ, pesi nāma ca jāyati "*

¹⁰ S.N.A. I, p.300

*"sattāhaṃ pesi bhavati, paripakkaṃ samūhataṃ,
vivaṭṭamānaṃ taṃ bhāvaṃ, ghanoti nāma jāyati.
yathā kukkuṭiyā aṇḍhaṃ, samantā parimaṇḍalaṃ
evaṃ ghanassa saṇṭhānaṃ, nibbattaṃ kammaṃ paccayā'ti.*

¹¹ S.N.A. I, p.301

*ghanā pasākhā jāyanti pañcame sattāhe dvinnam hatthipādānaṃ sīsassa vatthāya pañca pīlakā jāyanti, yam
sandhāyetaṃ vuttam "pañcame, bhikkhave, sattāhe pañca pīlakā santhahanti kammato' ti.*

¹² S.N.A. I, p.301

*ito param chatthasattamādīni sattāhāni atikkamma desanaṃ saṅkhipitvā dvācattālīse sattāhe parinatakalāma
gahetvā dassento kesāti ādimāha. tathā kesā lomā nakhāpi cāti dvācattālīse sattāhe etāni jāyanti.*

¹³ Mahatanhasamkaya sutta; M. I, p.266

tinnaṃ kho pana, bhikkhave, sannipātā gabbhassāvakkanti hoti.

¹⁴ Mahatanhasamkaya sutta; M. I, p.266

*yato ca kho bhikkhave, mātāpitāro ca sannipatitā honti, mātā ca utunī hoti, gandhabbo ca paccupatthito hoti,
evaṃ tinnaṃ sannipātā gabbhassāvakkanti hoti.*

The Aṭṭhakathā states the process in detail. Accordingly, in Buddhism, the prenatal development begins with *mātā ca utunī honti*; the fertilization of the mother. Before this period, the womb begins to discharge the unfertilized egg and it is called the menstruation. After the menstruation period, the womb is ready to be fertilized. The seven days after the menstruation there begins the period of fertilisation that lasts seven days. It is the time for the conception. At this time, the *gandhabba* comes to the embryo at the time of implantation. However, this *gandhabba* is not a being who is wandering near by her, but it is a being that comes right at the moment according to its kamma.¹⁵

In psychology, implantation is discussed in detail. The fertile period of a woman is determined by analyzing her menstrual cycle with an ovulation calculator or fertility chart. Normally, the cycle is a 28 day cycle. During the 14th day after a period, the ovum is released. This process is called ovulation and the days 12 to 16 days after a period are said to be a woman's most fertile period.¹⁶ Ovulation is the release of a single, mature egg from a follicle that is developed in the ovary. It usually occurs regularly, around day 14 of a 28-day menstrual cycle. Once released, the egg is capable of being fertilized for 12 to 48 hours before it begins to disintegrate. This is the most fertile period of the woman's cycle: during ovulation, the chances of conception are highest. The fertile period starts about 4-5 days before ovulation, and ends about 24-48 hours after it. This is because sperm can live in female body for approximately 4 to 5 days, and the egg can live for 24 to 48 hours after being released. On the day before and the day of ovulation a female is more fertile. Knowing the fertile, days either the chances of getting pregnant can be increased or avoid an unwanted pregnancy. As mentioned in Aṭṭhakatha, a continues period of seven days is stated as the most fertile days for a woman to be impregnate and such a woman has been compared to the paddy field which is ready to be cultivated.¹⁷

As the fertilized ovum, or zygote, moves down the fallopian tube toward the uterus, it is divided by mitosis into two cells. These two cells and all the resulting cells continue to divide, forming a ball-like structure, or blastocyst, that will contain 60 to 80 cells within 4 days of conception. Cell differentiation has already begun. The inner layer of the blastocyst will become the embryo, and the outer layer of cells will develop into tissues that protect and nourish the embryo.¹⁸

As the blastocyst approaches the uterus 6 to 10 days after the conception, small, burrlike tendrils emerge from its outer surface. When the blastocyst reaches the uterine wall, these tendrils burrow inward, tapping the pregnant woman's blood supply. This is implantation. This process is well explained in Aṭṭhakathā with no distinction¹⁹.

¹⁵ M.N.A. ii. p.310

mātā ca utunī hontī idam utusamayam sandhāya vuttam. mātugamassa kira yasmim okāse dārako nibbattati, tattha mahati lohitapilakā santhahitvā bhijjivā paggharati, vatthu suddham hoti, suddhe vatthumhi mātāpitusu ekavāram sannipātesu yāva satta divasāni khattameva hoti. tasmim samaye hatthagghāhaveniggāhādīnā aṅgaparāmasanenapi dārako nibbattatiyeva. gandhabboti tattrūpagasattho. paccupatthito hoṭī na mātāpitūnam sannipātam olokayamāno samīpe thito paccupatthito nāma hoti. kammayantayantito pana eko satto tasmim okāse nibbattanako hoṭī ayamettha adhippāyo.

¹⁶ Cengage Learning, - Psychology, 2009. 647 pages

¹⁷ M.N.A. ii. p.310

suddhe vatthumhi mātāpitusu ekavāram sannipātesu yāva satta divasāni khattameva hoti. tasmim samaye hatthagghāhaveniggāhādīnā aṅgaparāmasanenapi dārako nibbattatiyeva.

¹⁸ Developmental Psychology: Childhood and Adolescence, David R. Shaffer, Katherine Kipp Cengage Learning, 2009 - p. 122

¹⁹ S.N.A., i., p.301

Implantation is quite a development in itself. There is a specific "window of implantation" during which the blastocyst must communicate with the uterine wall, position itself, attach, and invade. This implantation choreography takes about 48 hours and occurs 7 to 10 days after ovulation, with the entire process being completed about 10 to 14 days after ovulation (Hoozemans et al., 2004). Once the blastocyst is implanted it looks like a small translucent blister on the wall of the uterus.

The period of the embryo lasts from implantation (roughly the third week) through the eighth week of pregnancy. By the third week, the embryonic disk rapidly differentiates into three cell layers. The outer layer, or ectoderm, will become the nervous system, skin, and hair. The middle layer, or mesoderm, will become the muscles, bones, and circulatory system. The inner layer, or endoderm, will become the digestive system, lungs, urinary tract, and other vital organs such as the pancreas and liver.²⁰

Only about half of all fertilized ova are firmly implanted, and perhaps as many as half of all such implants are either genetically abnormal and fail to develop, or burrow into a site incapable of sustaining them and are miscarried (Moore & Persaud, 1993; Simpson, 1993). So, nearly three zygotes out of four fail to survive the initial phase of prenatal development.²¹ This is why three conditions are given in Buddhism that are directly relevant to the pregnancy. Mahatanhāsankhaya sutta and Assalayana sutta state the three conditions. The suttas say even though the first, mother and father should be united and the second, mother should be in her fertile period if *bhavanga* does not come to the womb or the zygote, the pregnancy does not come true.²² Furthermore, the development proceeds at a breathtaking pace during the period of the embryo. In the third week after conception, a portion of the ectoderm folds into a neural tube that soon becomes the brain and spinal cord. By the end of the fourth week, the heart has not only formed but already begun to beat. The eyes, ears, nose, and mouth are also beginning to form, and buds that will become arms and legs suddenly appear. At this point, the embryo is only about 1/4th of an inch long, but already 10,000 times the size of the zygote from which it developed. At no time in the future will this organism ever grow as rapidly or change as much as it has during the first prenatal month.²³

Therefore, it is factual to confirm that zygote becomes embryo only when the *viññāna* comes to the womb. In other words implantation is done only after the arrival of *viññāna*.

tena so tattha yāpentīti tassa hi nābhito utthito nālo mātu udarapatalena ekābaddho hoti. so uppaladandako viya chiddo, tena āhāraso samsarivā āhārasamutthānarūpam samutthāpeti. evam so dasa māse yāpeti.

mātukucchigato naroti mātuyā tirokucchigato, kucchiyā abbhantaragatoti attho.

²⁰ Developmental Psychology: Childhood and Adolescence, David R. Shaffer, Katherine Kipp Cengage Learning, 2009 - p. 122

²¹ Developmental Psychology: Childhood and Adolescence, David R. Shaffer, Katherine Kipp Cengage Learning, 2009 - p. 122

²² Mahatanhasankhaya sutta; M. I, p.266

idha mātāpitāro ca sannipatitā honti, mātā ca na utunī hoti, gandhabbo ca na paccupatthito hoti, neva tāva gabbhassāvakkanti hoti.

²³ Developmental Psychology: Childhood and Adolescence, David R. Shaffer, Katherine Kipp Cengage Learning, 2009 - p. 122