



# International Journal of Indian Medicine

[www.ijim.co.in](http://www.ijim.co.in)

**ISSN: 2582-7634**

**Volume - 4, Issue - 7**

**July 2023**



# I J I M

INDEXED



# International Journal of Indian Medicine

Access the article online

International Category Code (ICC):  ICC-1702International Journal Address (IJA):  IJA.ZONE/258276217634

## “A CONCEPTUAL STUDY OF APARA (PLACENTA) IN AYURVEDA”

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**ABSTRACT:**

Ayurveda advice to lead good life and avoid bad lifestyle; whereas diagnosis and treatment of diseases is well proposed in Ayurveda science. Stree is important for producing new generation. In pregnancy the health of mother and child both are important aspect. If any one of them lacks proper nutrition and development then it forms various deformities in child. Though for proper nutrition in womb there is a way called Placenta. Which is a disc like and presents after separation from the uterine wall, fetal and maternal surfaces. Human placenta connects fetus with uterine wall of the mother. In Ayurveda it can be correlated with Aparā. It is developed up to the 12<sup>th</sup> week of pregnancy or Garbhādhāra. It helps to protect fetus from the various infections like bacterial, viruses etc. It is connected with umbilical cord for providing nutrition to fetus. Aparā is one the important part in garbhā. It is helpful for fetus respiratory, excretory etc functions.

**KEYWORDS-** Aparā, Placenta, Ayurveda**Corresponding Author:****Durga Shyamsingh Bais**

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**How to cite this article:** Bais D. “A Conceptual Study of Aparā (Placenta) in Ayurveda”. Int J Ind Med 2023;4(7):01-04 DOI: <http://doi.org/10.55552/IJIM.2023.4701>

**INTRODUCTION:**

Human placenta is disclaimed, oriodecidual organ which connects fetus with uterine wall of the mother. It is structure where maternal end fetal tissues come in direct contact without rejection.

**Development of Placenta<sup>1</sup>:** The placenta is developed from two sources. The principal component is fetal which develops from the chorion frondosum and maternal component consists of decidua basalis. When the interstitial implantation is completed on 11<sup>th</sup> day, the blastocyst is surrounded on all sides by lacunar spaces around cords of syncytial cells, called 'Trabeculae'. From the trabeculae develops the stem villi on 13<sup>th</sup> day which connect the chorionic plate with the basal plate. Primary, secondary and tertiary villi are successively developed from the stem villi. Arterio-capillary-venous system in the mesenchymal core of each villus is completed on 21<sup>st</sup> day. This ultimately makes connection with the intraembryonic vascular system through the body stalk. Simultaneously, lacunar spaces become confluent with one another and by 3rd-4th week, form a multilocular receptacle lined by syncytium and filled with maternal blood. This space becomes the future intervillous space. As the growth of the embryo proceeds, decidua capsularis becomes thinner beginning at 6<sup>th</sup> week and both the villi and the lacunar spaces in the abembryonic area get obliterated, converting the chorion into chorion laeve. This is, however, compensated by (a) exuberant growth and proliferation of the decidua basalis and (b) enormous and exuberant division and sub-division of the chorionic villi in the embryonic pole (chorionfrondosum). These two i.e., chorion frondosum and the decidua basalis form the discrete placenta. It begins at 6th week and is completed by 12th week. Until the end of the 16th week, the placenta grows both in thickness and circumference due to growth of

the chorionic villi with accompanying expansion of the intervillous space. Subsequently, there is little increase in thickness but it increases circumferentially till term. The human haemochorial placenta derived its name from haemo (blood) that is in contact with the syncytiotrophoblasts of chorionic tissue.

**The placenta at Term<sup>2</sup>:** The placenta, at term, is almost a circular disc with a diameter of 15-20 cm and thickness of about 3 cm at its centre. It thins off towards the edge. It feels spongy and weighs about 500 gm, the proportion to the weight of the baby being roughly 1:6 at term and occupies about 30% of the uterine wall. It presents two surfaces, fetal and maternal, and a peripheral margin.

**Fetal surface:** The fetal surface is covered by the smooth and glistening amnion with the umbilical cord attached at or near its centre. Branches of the umbilical vessels are visible beneath the amnion as they radiate from the insertion of the cord. The amnion can be peeled off from the underlying chorion except at the insertion of the cord. At term, about four-fifths of the placenta is of fetal origin.

**Maternal surface:** The maternal surface is rough and spongy. Maternal blood gives it a dull red color. A thin greyish, somewhat shaggy layer which is the remnant of the decidua basalis (compact and spongy layer) and has come away with the placenta, may be visible. The maternal surface is mapped out into 15-20 somewhat convex polygonal areas known as lobes or cotyledons which are limited by fissures. Each fissure is occupied by the decidual septum which is derived from the basal plate. Numerous small greyish spots are visible. These are due to deposition of calcium in the degenerated areas and are of no clinical significance. The maternal portion of the placenta amounts to less than one fifth of the total placenta. Only the decidua basalis and the blood in the intervillous space are of maternal origin.

**Margin:** Peripheral margin of the placenta is limited by the fused basal and chorionic plates and is continuous with the chorion laeve and amnion. Essentially, the chorion and the placenta are one structure but the placenta is a specialized part of the chorion.

**Attachment:** The placenta is usually attached to the upper part of the body of the uterus encroaching to the fundus adjacent to the anterior or posterior wall with equal frequency. The attachment to the uterine wall is effective due to anchoring villi connecting the chorionic plate with the basal plate and also by the fused decidua capsularis and vera with the chorion laeve at the margin.

**Separation:** Placenta separates after the birth of the baby and the line of separation is through the deciduas spongiosum.

**Structures of Placenta<sup>3</sup>:** The placenta consists of two plates. The chorionic plate lies internally. It is lined by the amniotic membrane. The umbilical cord is attached to this plate. The basal plate lies to the maternal aspect. Between the two plates lies the intervillous space containing the stem villi with their branches, the space being filled with maternal blood.

**Amniotic Membrane:** It consists of single layer of cubical epithelium loosely attached to the adjacent consists of (i) primitive mesenchymal tissue containing chorionic plate. It takes no part in formation of the placenta.

**Chorionic Plate:** From within outwards, it branches of umbilical vessels (ii) a layer of cytotrophoblast and (iii) syncytiotrophoblast. The stem villi arise from the plate. It forms the inner boundary of the choriodecidual space.

**Basal Plate:** It consists of the following structures from outside inwards;

- Part of the compact and spongy layer of the decidua basalis.
- Nitabuch's layer of fibrinoid degeneration of the outer syncytiotrophoblast at the

junction of the cytotrophoblastic shell and decidua.

➤ Cytotrophoblastic shell.

➤ Syncytiotrophoblast.

**Intervillous Space:** It is bounded on the inner side by the chorionic plate and outer side by the basal plate.

**Stem Villi:** These arise from the chorionic plate and extends to the basal plate.

**Functions of Placenta<sup>4</sup>:**

1. Transfer of nutrients and waste products between the mother & fetus.
2. Endocrine function
3. Barrier function
4. Immunological function

**Concept of Aparā<sup>5</sup>:** Aparā is helpful for Garbha poshana. It is correlated with Placenta in modern medicine. According to Ayurveda, when Garbhadharana occurs in women's due to Garbha the Pathway of Artavavaha Strotas was blocked. Therefore, in females there is stoppage of menses. This Rakta dhatu goes upwards and helps to nourish Stanya and develops Aparā in females. In Garbhadharana period most of the works happens through the help of Aparā. According to Ayurveda; the formation of Aparā is up to 12<sup>th</sup> week of pregnancy.

**Functions of Aparā:**

- a) Garbha Poshana
- b) Garbha Shwasana (Respiration)
- c) Garbha Malavisarjana
- d) Protects Garbha from various bacteria and viruses

**DISCUSSION:**

Ayurveda prevents from the diseases as well it helps to provide proper and good health for an individual. A human can protect his or her health from diseases, infections, etc. But Fetus in the womb of an women can't protect our self from infections. So that for protection, nutrition, excretion various purpose Placenta or Aparā is helpful. It helps to provide proper nutrition to the child. In Ayurveda Placenta can be known as Aparā.

This Apara is important aspect for fetal health. It is formed with the help of Avaruddha Artava in Ayurveda. Placenta having different functions like helps to excrete waste products, helps in respiration, fetal growth, fetal health. The placenta is crucial for fetal survival and its growth. It is an Fetomaternal organ. Which is connected with both mother and the fetus. It is developed during the Garbhadharana in womens. Through the help of Apara fetal circulation happens. Placenta carries oxygen from mother to fetus. Placenta having many parts. Though they are helpful for protection and providing nutrition to the fetus.

**CONCLUSION:**

Placenta is an important organ between mother and fetus helps in multiple functions like endocrine, respiratory, etc. Normal development of placenta is very important during the phase of pregnancy. Apara is the most important aspect of Garbha sharira in

Ayurveda. It is the only way to get nutrition for fetal in mother's womb. It is also free from any deformities for proper fetal circulation and its growth.

**REFERENCES:**

1. D.C. Datta, Hiralal Konar, Textbook of Obstetrics, chapter 3<sup>rd</sup>, New central book agency, Delhi, 28.
2. D.C. Datta, Hiralal Konar, Textbook of Obstetrics, chapter 3<sup>rd</sup>, New central book agency, Delhi, 29.
3. D.C. Datta, Hiralal Konar, Textbook of Obstetrics, chapter 3<sup>rd</sup>, New central book agency, Delhi, 30-31.
4. D.C. Datta, Hiralal Konar, Textbook of Obstetrics, chapter 3<sup>rd</sup>, New central book agency, Delhi, 35.
5. Sushruta, Ambika datta Shastri, Sushruta Samhita, Sharira sthana, adhyaya 4<sup>th</sup>, Shlok no.24, Vol.1, Chaukhambha Sanskrit Sansthana, Varanasi, Reprint 2015, 39.

**Source of Support: None declared**

**Conflict of interest: Nil**

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An Official Publication of ARCA- AYURVEDA RESEARCH & CAREER ACADEMY

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