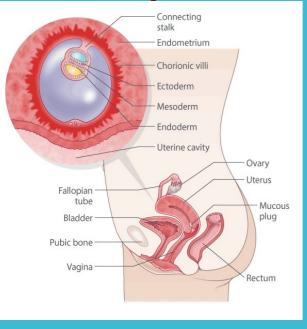
Masanumasik garbha vriddhi (Month- wise development of foetus)



By:

Dr. Shikha Singh

प्रथम मास (First month)



- तत्र प्रथमे मासि कललं जायते ॥ (सु.सं.शा. ३/१८)
- खेटः श्लेष्मा, तेन खेटभूत इति श्लेष्मसदृश इत्यर्थः । (च.सं.शा. ४/९ चक्र. टीका)
- Modern view:

After a woman ovulates and meets the sperm the egg is normally fertilized within 24-48 hours. This process, leads to conception and the women gets pregnant. By the end of this month, Baby is 4-5 mm. long and the lungs, stomach, and liver start to develop. Towards the end of this month the heart, digestive system, backbone and spinal cord begin to form.

द्वितीय मास (Second month)



- द्वितीये मासि घनः संपद्यते पिण्डः पेश्यर्बुदं वा । तत्र घनः पुरुषः, पेशी स्त्री, अर्बुदं नपुंसकम् ॥ (च.सं.शा. ४/१)
 - Modern view:

At the 6th week, heart will be beating. Brain and cranial nerves will also begin to form. Eyes, nose, lips, tongue, ears and teeth are forming. The arms and legs are well formed. Penis begins to appear in boys. Baby is 24 –30 mm. long and weighs about 1-2 grams by the end of this month.

तृतीय मास (Third month)

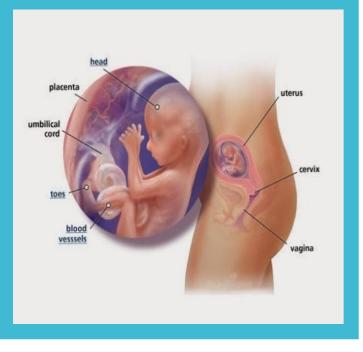


तृतीये हस्तपादशिरसां पञ्च पिण्डिका निवर्तन्तेऽङ्गप्रत्यङ्गविभागश्च सूक्ष्मो भवति।। (सु.सं.शा. ३/१८)

• Modern view:

By the end of 12 weeks the baby's face is well formed. Baby's sex organs continue to develop, but it is still too difficult to differentiate gender. Her nails start to develop and earlobes are formed. The arms, hands, fingers, legs, feet and toes are fully formed. Baby has developec most organs and tissues. At the end of 12 weeks the baby is 60 – 70 mm. long and weight is about 12 –14 gms.

चतुर्थ मास (Fourth month)

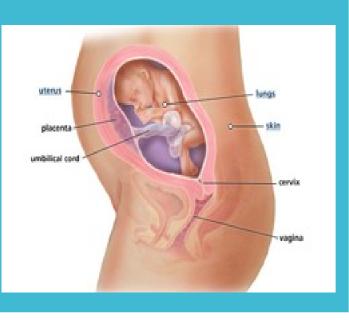


• चतुर्थेऽङप्रत्यङ्गविभागः प्रव्यक्तो गर्भश्च स्थिरो भवति । (अ.सं.शा. २/२२)

Modern view:

Baby starts developing reflexes, such as sucking and swallowing. Sweat glands are forming on palms and soles. Fingers and toes are well defined. The baby's fingers and toes have fingerprints. Gender is identifiable. Skin is bright pink, transparent and covered with soft, downy hair. The baby at this stage is about 12 cm. long and weight is about 110 gms.

पंचम मास (Fifth month)

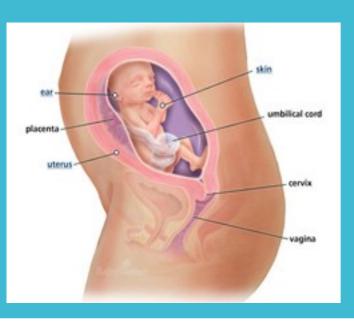


• पञ्चमे मनः प्रतिबुद्धतरं भवति मांसशोणितोपचयश्च ।। (अ.सं.शा. २/२३)

Modern view:

The mother begins to feel foetal movement, called "quickening." Hair begins to grow on baby's head. Soft woolly hair called lanugo covers baby's body, some may remain until a week after birth. The baby can be start sucking a thumb, yawn, stretch, and make faces. Ears are developed as well and may be able to hear. Internal organs also start maturing. Eyebrows, eyelids and eyelashes appear. By 20 weeks the baby is about 16 cm. long and its weight is about 300 gms.

षष्ठम् मास (Sixth month)



 षष्ठे मासि गर्भस्य बलवर्णोपचयो भवत्यधिकमन्येभ्यो मासेभ्यः ।।

(च.सं.शा. ४/२२)

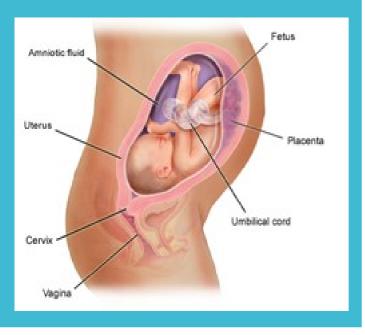
(सु.सं.शा. ३/३०)

Modern view:

• षष्ठे बुद्धिः ।।

Baby's immune system is developing and beginning to create its own antibodies. Lungs are beginning to develop and alveoli are forming. Skin is wrinkled and red. At this stage the baby is 21 cm. long and its weight is about 630 gms.

सप्तम् मास (Seventh month)

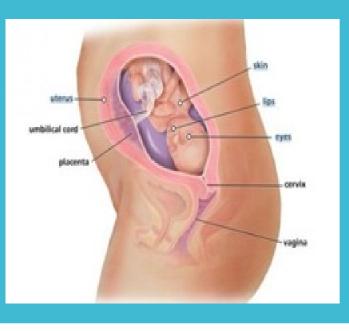


• सप्तमे सर्वाङ्गप्रत्यङ्गविभागः प्रव्यक्ततरः॥

(सु.सं.शा. ३/३०)

• Modern view:

Baby may be very active now and others may be able to see its movements. Fat layers are forming. Eyes partially open, eyelashes are present. Thinskin is red and covered with vernix caseosa. The baby at this stage is about 25 cm.long. Its weight is about 1100 gms. अष्टम् मास (Eighth month)



• ओजोऽष्टमे सञ्चरति मातापुत्रौ महुः क्रमात ।। तेन तौ म्लानमुदितौ तत्र जातो न जीवति । शिशरोजोऽनवस्थानान्नारी संशयिता भवेत् ।। (अ.हृ.शा.१/६२)

Modern view:

The overall growth of baby is rapid. Tremendous brain growth occurs at this time. Most body organs are now developed, except for the lungs. Movements or "kicks" are strong enough to be visible from the outside. Skin is less wrinkled. Baby is about 28 cm. long. Weight is about 1800 gms. नवम् मास (Ninth month)



- After 9th month it is time to deliver the foetus.
- Modern view:
- At the end of the 9th month the baby is now fully developed and can survive outside the mother's body. The lungs are mature. Skin is pinkand smooth. Testes in the scrotum are palpable in the inguinal canal. Finger nail reaches beyond finger tips. The baby at this stage is 32 – 36 cm. long. Weight is about 2500-3400 gms. The baby settles down lower in the abdomen to prepare for birth and may seem less active.

Conclusi on

In 9 months review of both ayurvedic and modern, we can see that, except few things whole description of foetal growth and development are same.



