PREGNANCY AND EMBRYONIC DEVELOPMENT

After implantation, finger like projections appear on the trophoblast-chronic villi surrounded by uterine tissue and maternal blood.

Chronic villi and uterine tissue interdigitated with each other and jointly form a structural and functional unit between foetus and maternal body - placenta which facilitate supply of oxygen and nutrients to embryo and removal of CO2 and excretory materials produced by embryo.

Placenta is connected to embryo through embilical cord. It produces hormones like human chorionic gonadotrophin(hCG), human placental lactogen (hPL) estrogen, progestogens. In later phase, relaxin is also secreted by ovary.

Immediately after implantation, inner cell mass differentiates into outer ectoderm and inner endoderm. Mesoderm soon appears in between.

Inner cell mass contains certain cells(stem cells) have potency to give rise to all tissue and organs.

In 1st month heart is developed.

In 2nd month, foetus develops limbs and digits.

In 12 weeks, major organ system are formed.

In 5 months, first movements of foetus and appearance of hairs.

In 24 weeks, body covered with fine hairs, eyelids separate, eyelashes are formed.