

CHAPTER 5

DECIDUA

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What does decidua mean?

The word of decidua is originated from the verb decidere. It is meaning to die, to fall out, or to separate.

What is decidulization?

Decidualization points out the transformation of endometrial stromal fibroblasts into highly specialized secretory cells.

What happen in the endometrium during decidualization?

Uterine glands transform into secretory cells, uterine natural killer cells accumulate in endometrium and remodeling occurs in vascular bed.

Which species show decidua formation?

Decidualization take places only in species in which placentation involves splitting of the endometrial epithelium and invasion of maternal arterioles by the trophoblast cells.

What is the function of decidua?

This type of cellular transformation supplies a nutrient and immunomodulator matrix essential for embryo implantation and placental development.

Does decidualization is obligatory for embryo implantation?

Decidualization is obligatory in many mammalian species. However, decidua formation is not mandatory for embryo implantation in human. Tubal or peritoneal implantation of the embryos support this idea.

What is the mechanism that continues decidualization?

Two molecules that allow to continue the process of decidualization are postovulatory rise in progesterone release and endometrial cAMP production.

development is failed in endometriosis. Premenstrual spotting and endometriosis related implantation defect may be most important signs of decidualization failure in endometriosis. It is most likely that similar to endometriosis, impaired decidualization may be underlying cause of subjects suffering from recurrent miscarriage.

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