

CORPUS LUTEUM — A SMALL ENDOCRINE GLAND OF GREAT IMPORTANCE

Summary

The corpus luteum is an endocrine gland that secretes mainly progesterone. It is formed after ovulation during luteinization of ovarian follicle cells and undergoes tissue remodeling through the whole lifespan until luteolysis. Depending on the species, the corpus luteum is the major source of progesterone throughout the entire gestation or becomes replaced with placenta. Its activity is controlled by numerous luteotropic and luteolytic factors derived from pituitary gland, ovary, uterus, placenta and embryo. The corpus luteum is comprised of distinct

cell types: luteal (steroidogenic) cells and nonluteal cells such as endothelial cells, pericytes, fibroblasts and immune cells. The mutual interactions between each cell type determine adequate functioning of the luteal tissue. The aim of this article is to describe the structure and function of mammalian corpus luteum with emphasis put on differences that occur between species. Furthermore, we have summarized the current knowledge and our recent findings related to the influence of endocrine disrupting chemicals on the luteal function.