

Abstract

For many years, estrogens have been considered typically female sex hormones. It is now certain that they are also very important in the regulation of male reproduction, whether their effect is positive or negative.

Endogenous estrogens in mammalian males are an important part of the endocrine system. Estrogens play an important role in the growth and maintenance of bone mass, as well as in the development of germ cells and in the marches of spermatogenesis. Healthy sperm are essential for successful reproduction. Effect of endogenous estrogens is partly involved in the regulation of proper development of sperm.

Besides the positive effect of endogenous estrogens, there is also a negative effect of estrogens from the external environment, so-called environmental estrogens. Between environmental estrogens are man-made chemicals, xenoestrogens, which increasingly contaminate the environment. Hazards of these estrogenic substances in nature is hidden in their ability to act as endocrine disruptors, which cause defects in many aspects of mammalian reproduction.

With regards to the fact that there are more and more substances in current environment that can interfere with hormonal path of mammalian reproduction, it is important to look at this issue. Reproductive disorders that may be caused by endocrine disruptors pose a risk not only for us but for future generations.

Key words: sperm, estrogens, environmental estrogens, xenoestrogens, endocrine disruptors