

Build-up of estrogen and other endocrine disruptors in our habitat has been recently an issue widely debated not only amongst health professionals but also by main stream media. Their impact on wild animals has been observed and documented for some time now and several studies on rodents and other mammals have demonstrated a highly probable connection between exposure in early stages of development to endocrine disrupting chemicals and abnormal sexual maturation of males (hypospadias, cryptorchidism), as well as impaired male reproductive functions. Epidemiological studies have been claiming significant drop in sperm count and quality of spermatozoa in last several decades, increased incidence of testicular cancer, which is being among other causes attributed also to pooling of endocrine disruptors in the environment. This reasoning brings a lot of controversy since the respective chemicals are by-products of substances commonly used in agriculture and industry and replacing them is expensive and logistically challenging. It is also quite difficult to determine and quantify the long term effects of specific chemicals on human body since the population is being exposed to not just one substance but to a whole cocktail of them and the symptomatology is subjected to age, length of the exposure, quantity of the chemicals in the environment, their interactions and many other variables.

My ambition is to give a review of what different authors state to be the effects of estrogens on human male reproductive system and to give my assessment to what extent this plays a significant role in growing rate of sexual defects in the human population.<sup>5</sup> First part will summarize the physiology of reproductive axis in

males and how it responds to sexual hormones and estrogens in particular. Further the epidemiology and symptomatology of male infertility with respect to exposure to endocrine disruptors will be introduced in the second part. Finally, studies on rodents which strive to describe the underlining mechanisms of estrogen effects on male reproductive system will be presented.