Abstract

Toxoplasma gondii is one of the most widespread parasitic protozoa in humans in developed countries. It has a wide range of hosts including various warm-blooded animals and humans. Recent studies suggest that it could influence the fertility of humans. The aim of this work was to find out, what is the prevalence of toxoplasmosis in groups of women and men with fertility problems and whether Toxoplasma gondii has an effect on specific fertility parameters. In women, Significant positive correlation between toxoplasmosis and the percentage of oocytes in the follicles was found among women. Group of men with semen pathology diagnosis revealed a statistically significant negative association between toxoplasmosis and the percentage of morphologically normal sperm. It seems that latent toxoplasmosis in men can also worsen the negative effect of tobacco smoking on fertility. The impairment of fertility in men could be the result of the manipulation activity of Toxoplasma gondii, which leads to more frequent sexual intercourse due to decreased ability to conceive. This could increase the likelihood of sexual transmission, which is currently suggested as one of the possible ways of transmission of toxoplasmosis.