

## ABSTRACT

**Author:** Helena Kopřivová

**Title:** Autoantibodies in women with infertility

**Field of study:** Medical laboratory technician, combined study form

### **Aim of the thesis:**

In the thesis I have attempted to summarize the current knowledge on the relationship between the presence of autoimmune diseases or autoantibodies and infertility, with a focus on sterility. I compared these findings with the presence of autoantibodies and in relation to their occurrence in a group of 150 women who were referred to a detailed examination from a reproductive immunologist.

### **Main findings:**

Infertility affects approximately 10 % of the world's population. For most of the women affected the cause of infertility is known. Approximately 10 % of women's infertility falls under the category of "unknown reasons". In a study group of 150 women it was necessary to exclude immunological problems that prevented pregnancy or led to repeated abortions.

In our study group, 46 % of the infertile women were diagnosed with any of a variety of autoimmune diseases before visiting the center for assisted reproduction. In their cases, an early and proper diagnosis of autoimmune disease was a prerequisite to subsequent treatment techniques of assisted reproduction. The presence of positive antinuclear factor was very significant. Testing for antibodies against tissue transglutaminase, associated with celiac disease was confirmed in 18 % of women who repeatedly miscarried. A clearly known fact is the correlation between the presence of antiphospholipid antibodies and antibodies against Annexin V, particularly in women with repeated miscarriages. Among other organ-specific antibodies, such as antibodies against ovaria and zona pellucida, was the positive presence demonstrated in approximately 5 % of women. In 17 % of the group of infertile women antibodies against sperm were discovered.

### **Conclusion:**

In my thesis I have tried to draw attention to the causal association of sterility and infertility with a certain spectrum of autoantibodies, which was proven in a study group, especially for antiphospholipid antibodies, antibodies against Annexin V, sperm antibodies, and antibodies provided in the diagnosis of celiac disease.

