

## **Summary:**

### **Impact of Chlamydia trachomatis infection on chronic pelvic pain.**

The aim of the study was to determine whether women with chronic pelvic pain and Chlamydia infection differ from women with chronic pelvic pain without Chlamydia infection in respect of findings on laparoscopy and sexual behaviour.

In a study conducted from April 2006 to December 2009, we monitored a group of 129 female patients suffering from chronic pelvic pain of more than 6 months duration. All monitored patients underwent laparoscopy, and during the procedure, swabs were taken from their Fallopian tubes and cervix, which were immunofluorescenced for the presence of Chlamydia trachomatis antigen. The patients were divided into two groups (Chlamydia positive and Chlamydia negative) according to the presence of Chlamydia antigen. The patients completed questionnaires covering the age at first sexual intercourse, number of lifetime and current sexual partners, frequency of sexual intercourse and the method of contraception. The differences in findings on laparoscopy and questionnaire results of women with positive and negative proof of Chlamydia infection were studied. Fisher's exact test was used for data description and group differences analysis.

We observed that 30,2% (n=39) of a cohort of 129 women with chronic pelvic pain were positive for Chlamydia infection. The difference is statistically significant ( $p=0,002$ ). This suggests that Chlamydia infection is an important factor in ethiology of chronic pelvic pain. Despite the fact that the occurrence of Chlamydia infections depends on sexual activity, no statistically significant differences were discovered in the sexual behaviour of patients with chronic pelvic pain with either proven Chlamydia infection or without it. The only difference was the age at first sexual intercourse, which was lower in women with positive Chlamydia infection. Laparoscopic findings in Chlamydia positive women did not statistically differ from those of Chlamydia negative women. The occurrence of no visible pathology in pelvis was higher in the Chlamydia positive group, 31% vs. 23%. On the other hand the frequency of adhesions in Chlamydia positive women was lower, 31% vs. 43%.

The results obtained in our study suggest that Chlamydia infection is an important ethiological factor of chronic pelvic pain. On the other hand it does not alter the sexual functioning of women with chronic pelvic pain. We did not found higher frequency of adhesions in Chlamydia positive women.