

and depends on duration of action. The procedure APC was carried out on the device FOTEK EA-140 (OOO "FOTEK", Ekaterinburg). 75 patients from 20 till 32 years old were included in the research. The histological diagnosis was epidermisational endocervicosis. Patients were divided into three groups, for 25 persons in each. The rating of efficiency of various techniques was based on interrogation, survey and colposcopy, that was done in 1 and in 2,5 months after procedure. There were fixed intensity of pain sensations during and after manipulation, duration of secretions from sexual ways, and also the speed of epitalisation.

**Results of research.** During the procedure patients of the 1 group (APC) marked "the moderate pains" or small discomfort in the bottom of a stomach which did not require analgesia, patients of the 2 groups (DEC) marked pulling pains in the bottom of a stomach of various intensity, in the 3 group (criodestruction) not any of the patients marked pain sensations during manipulation. After procedure 28% patients from the 1st group (APC) marked smear secretions from sexual ways in 7-10 days. All patients from the 2nd group complained

within one month on purulent – bloody secretions from sexual ways. At 64% patients from the 3 group (criodestruction) within one month had plentiful watery secretions from sexual ways, sometimes with an impurity of blood.

According to the results of colposcopy in 2,5 months, the recovery in the 1st group (APC) took place at 92% of the women, in the 2nd group (DEC) it was at 88% of the patients, and only at 48% of patients from the 3 group (criodestruction).

**Conclusions.** 1. APC has high efficiency, good endurance and provides high rate of endocervix epitalisation, combining with advantages of methods of DEC and criodestruction, that allows to recommend this method to use wider for treatment of benign diseases of uterus cervix. 2. More sparing electro-surgical influence of APC on tissue than of DEC and, probably absence of rough scaring of uterus cervix in the remote period after treatment, can be additional argument for its usage in women who did not beget a child. 3. The complete recovery after the usage of the method of APC comes much faster, than after criodestruction.

Ivanova L.I., Fedina E.V., Kurganskaya N.A.

Department of Obstetrics and Gynecology of Military-Medical Academy; Faculty of Low-Invasive, Reconstructive Plastic Laser Surgery of Mechnikov Medical Academy; Northwest Center for Laser Medicine, Saint Petersburg, Russia

## THE USE OF A HIGH-ENERGY SEMICONDUCTOR LASER (ATCUS-15) IN TREATMENT OF BACKGROUND AND PRECANCEROUS DISEASES OF CERVIX OF THE UTERUS

**Purpose.** To study the efficiency of laser destruction in treatment of background and precancerous diseases of cervix of the uterus.

**Material and methods.** 648 women in the age from 18 to 48 years with various pathologies of cervix of the uterus have been examined and treated.

The standard algorithm has been used, including expanded colposcopy, bacterioscopic, cytologic and morphological examination, PCR diagnostics of genital infections. STD was observed in 87% of women, HPV was observed in 38% of cases according to results of PCR.

In 68% of women suffering from STD a combination of infections was observed. Most frequently revealed was a combination of HPV, ureaplasmosis and bacterial vaginosis. All patients have received a complex stage-by-stage therapy. At the first stage antibacterial medications were used, taking into account the sensitivity of pathogen, as well as antiviral, antimycotics, local antiseptics, immunocorrectors. At the second stage, cervix of the uterus was subjected to laser destruction using the high-energy semi-conductor laser Atkus-15 (with the output power from 12 to 15 Watts) on an outpatient

basis, on the 5-9th day of the menstrual cycle. At the third stage, in the postoperative period, all patients received the immunomodulating therapy with lycopede, with simultaneous exposure of the wound surface to low-intensive helium-neon laser irradiation.

**Results and discussion.** After the laser destruction of cervix of the uterus, the control examinations after 1, 2, and 3 months revealed a complete epithelization of cervix of the uterus and the absence of HPV sub-clinical attributes (colposcopic and cytologic) in 87% of women. 13% of patients demonstrated a flaccid epithelization which more frequently was revealed with background HPV and with a combination of various infections, requiring repeated complex treatment. Six months after treatment, in 2,5% of patients iodine-negative zones (relapse of HPV) were revealed that required repeated laser destruction.

**Conclusions.** The use of the laser destruction method in patients of all age groups with a combination of background and inflammatory diseases of cervix of the uterus may help in future to prevent cancer development in cervix of the uterus, and can also be used to improve the reproductive health of women.