

REGENERATION OF ATROPHIC ENDOMETRIUM IN ART PROGRAMS. EFFECT OF PHOTOTHERAPY. LONG-TERM RESULTS.

V Zuev (RU) [1], T Dzhibladze (RU) [2], A Ischenko (RU) [3], I Khokhlova (RU) [4], Y Pimancheva (RU) [5], A Osipova (RU) [6]

Objective. The aim of this study is to evaluate long-term results of photo-therapy of atrophic endometrium in ART-programs.

Design We present a prospective study. 260 patients with atrophic endometrium prio IVF- embryo transfer cycles were divided in groups. Group I –endometritis, group II – Asherman syndrome, group III – hormonal retardation – and IV – endometrial atrophy after embolization of uterine arteries.

Diagnostics and Methods. Laser-spectral conversion diagnostic, ultrasonography. Office hysteroscopy, morphologic and immunochemical methods. Spectral features (levels of reflection and luminescence) were measured in 3 areas –top part, middle and internal oss of the uterus. Point to compare was skin point in internal part of femur skin . Laser fluorescence was used to determine oxygenation, proliferation, microcirculation and aerobic or anaerobic metabolism in endometrium «on line». Non- invasive procedure. Time for detection – 1 minute.>

Treatment: Laser spectroscopy, Chlorophillin, induced laser phototherapy – non invasive technology.

Setting: Setchenov University, Moscow, Russia

Oxygenation, proliferation, microcirculation, metabolism, structurisation were evaluated using spectroscopy for dynamic control while treatment.

Phototherapy included per oral use of chlorin containing drug and it's laser activation inside the uterus.

Results. Restoration of endometrium with increased oxygene level, proliferation activity, microcirculation net, and metabolism level in group I was noticed within 5 weeks, in group II 8 weeks, in group III - 4 weeks, and group IV 9 weeks.

Pregnancy rates: in gr. I 42,8%, in II -18,4, in gr. III- 62,7, and in gr. IV- 23,6%

Duration of effect of photo therapy for oxygenation, proliferation of cells, microcirculation, metabolism and strucrurisation was detected by means of spectroscopy within 10-12 months.

Conclusion. Laser fluorescent spectroscopy and laser phototherapy showed to be high effective technique for restoration of atrophic endometrium ready for ART- programs.

[1] Sechenov University, Moscow, [2] Sechenov University, Moscow, [3] Sechenov University, Moscow, [4] Sechenov University, Moscow, [5] Sechenov University, Moscow, [6] Sechenov University, Moscow