Objective. To evaluate condition of reproductive system in acromegalic women.

Results. Of 50 women of Moscow region acromegaly registry 24 underwent pituitary surgery and received somatostatin analogs. 26 patients (pts) were given only medical treatment of acromegaly. 16 women (median 45 years) had surgical menopause (n=6 were operated before presence of common features of acromegaly). Prospective pelvic ultrasonographic (US) examination with color doppler imaging (CDI) revealed asymptomatic, small sized myomas with low blood flow in the uterine arteries (UA) and the vessels feeding the myoma node in 21 of 35 pts. US and CDI data were noted: uterus volume (V) 46.1±12.2 cm3, myoma node V 4.4±2.7 cm3, endometrial thickness 0.28±0.11, right ovary V 1.78±0.9 cm3, left ovary V 1.89±0.7 cm3; peak systolic velocity (PSV) 21.35±12.3, pulsatility index (PI) 4.98±2.3 and resistance index (RI) 0.75±0.06 were in right UA; PSV 21.5±10.5, PI 6.15±4.0, RI 0.73±0.28 were in left UA and PSV 12.25±3.45, PI 2.43±1.15, RI 0.91±0.74 were in the artery feeding the myoma node. Myomas were associated with: adenomyosis (n=6), endometrial polyps (n=5) and endometrial hyperplasia (EH) (n=2). Surgery was recommended to one patient with submucosal myoma and one patient with ovarian cystoma, myoma and endometrial hyperplasia. Mature ovarian teratomas were found in 4 pts.

Conclusions. The prevalence of myomas (73.4%) was significantly higher in acromegalic women than in the general population (about 40%). The alterations of reproductive system organs (35% firstly diagnosed) were found in the majority of pts and required treatment, as well surgery. The checkup algorithm of acromegalic women should include assessment of condition of reproductive system. Progressive growth of myoma may be one of the first feature of acromegaly, that is why is essential to screen insulin-like growth factor I levels.