

## **P89. Morphofunctional endometrium changes in women with autoimmune thyroid pathology and pregnancy losses.**

*K Fris (RU) [1], E Andreeva (RU) [2], N Platonova (RU) [3], I Voronkova (RU) [4]*

**Context:** Spontaneous miscarriage is a common complication approximately to 20% of pregnancies. Endocrine pathology, in particular thyroid diseases, can be a reason of structural and functional insufficiency of gravidar endometrium, which can increase the risk of repeated miscarriages in future.

**Objective:** To evaluate structural endometrium changes in women with autoimmune thyroid pathology and reproductive losses in order to select the optimal set of survey and recommendations for women with a view to optimal pregnancy preparation.

**Methods:** Histological endometrium evaluation was carried out by its staining with hematoxylin and eosin according to a conventional technique.

**Patients:** 84 women, mean age (Me) 29 years [27,0; 34,0], were divided into the following groups: I- women with reproductive losses and hypothyroidism as outcome of Hashimoto disease (n =21), II- women with a history of reproductive losses in combination with another type of autoimmune thyroid destruction, TPOAb+ (n =21), III- women with reproductive failures without autoimmune thyroid pathology (n =21), IV- healthy women of the control group (n =21).

**Intervention(s)** In the second phase of the menstrual cycle was held endometrium aspiration using a gynecological set Pipelle de Cornier.

**Main Outcome Measure(s)** In the first three groups in the majority percent of cases (I- 76,2%, II- 62%, III – 57,1%) the biopsy material had endometrium pathology. 16 patients (76,2%) of control group detected endometrium, corresponded to the day of menstruation. According to morphological results, 47.6% of patients group I histologically had luteal phase insufficiency, which was significantly higher compared with III and IV groups (9.5%,  $p = 0.015$ ).

**Results:** Morphological endometrium diagnostics in women with history of miscarriages and autoimmune thyroid diseases indicated a greater degree of endometrium pathology in particular, luteal phase deficiency which damages the receptor status and disrupts the secretory function of the endometriotic glands.

**Conclusions:** The application of Pipelle aspiration method of endometrium research increases it's functional evaluation in women with autoimmune thyroid diseases and reproductive failures and can be used in a comprehensive examination in preparation for pregnancy in this category of women.

Supported by Grant of President of Russian Federation ? ??-4717.2012.7