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P33. The role of the expression of steroid receptors in ovaries of women with premature ovarian inssuficiency (POI).

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Context. ?long with molecular genetic, autoimmune, infectious causes, mitochondrial dysfunction, the role of increased expression of the androgen receptor (AR) is discussed. In the ovaries of postmenopausal women the decrease of the expression of the estrogen receptor-? (ER-?) was described. The change in the ovarian expression of the steroid hormone receptors associated with POI remains poorly understood.
Objective. To evaluate the expression of steroid receptors (AR, ER-?, ER-? and PR) in ovarian tissue in patients with POI in comparison with women with physiological menopause.
Participants and methods. The study included 28 women, 18 patients with POI (median age 33.25 ± 5.2 years) with the ovarian tissue biopsies were obtained from laparoscopy and ovarian biopsy, and 10 healthy women after 45 years (mean age - 49.6 ± 4.4 years), who died in emergency situations with a preserved reproductive function in the anamnesis. The expression of AR, ER-?, ER-? and PR in the nuclei of ovarian cells was determined by the immunohistochemical method. Quantitative assessment of expression of receptors was calculated by Histo score (H.S.).
Results. In POI patients positive expression of AR was detected in 22.2% of cases, ER-? – 16.7%, ER-? -77.8%, PR - 55.5%. Although in women with the morphological pattern of age-related ovarian reserve exhaustion cortical stromal cells demonstrated only positive expression of ER-? (90%). In the group of patients with POI H-score for AR expression was 91.25 ± 76.85, ER? - 22.67 ± 15.4, ER? - 276.1 ± 105.5, PR - 92.1 ± 55.7. In postmenopausal women the expression of ER? was 315.56 ± 44.4.
Conclusion: The obtained data allow to make a conclusion about the relative safety of the receptor apparatus in case of POI in comparison with postmenopausal women, which also proves the possibility of spontaneous onset of pregnancy in 6.8% of patients with hormone therapy.

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