



## "INNOVATIVE ACHIEVEMENTS IN SCIENCE 2025"

### POLIKISTOZ TUXUMDON SINDROMIDA (PTSYA) ENDOMETRIYNING GISTOLOGIK XUSUSIYATLARI

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**Annotatsiya:** PTSYA bilan og'riqan ayollarda endometriyning morfologik, immunogistokimyoviy va molekulyar o'zgarishlarini kompleks o'rganish hamda progesteron-rezistentlik, yallig'lanish va oksidlovchi stressning patogenetik mexanizmlarini aniqlash.

**Kalit so'zlar:** endometriy, immunogistokimyoviy, molekulyar, progesteron-rezistentlik, yallig'lanish, oksidlovchi stress.

Dolzarbligi Polikistoz tuxumdon sindromi (PTSYA) — reproduktiv yoshdagi ayollar orasida eng ko'p uchraydigan endokrin buzilishlardan biri (6–15%). Gormonal va metabolik o'zgarishlardan tashqari, endometriyda kuzatiladigan morfofunktsional o'zgarishlar reproduktiv salomatlik va giperplaziya xavfini belgilovchi muhim omillardandir.

Maqsad PTSYA bilan og'riqan ayollarda endometriyning morfologik, immunogistokimyoviy va molekulyar o'zgarishlarini kompleks o'rganish hamda progesteron-rezistentlik, yallig'lanish va oksidlovchi stressning patogenetik mexanizmlarini aniqlash.

Materiallar va usullar - 120 nafar ayol (18–40 yosh):

- Asosiy guruh: 80 nafar PTSYA bilan;
- Nazorat guruhi: 40 nafar sog'lom ayol.

Qo'llanilgan usullar: gistologiya, immunogistokimyo ( $ER\alpha$ , PR-A/B, Ki-67, VEGF, HOXA10, LIF, NF- $\kappa$ B va b.), RT-qPCR, Western blot, bioinformatik tahlil (GEO, STRING).

Statistik tahlil: SPSS v.26, GraphPad Prism 9;  $p < 0,05$ .

Asosiy natijalar

- Morfologiya: sekretor transformatsiya kechikishi, giperplaziya, fibroz, tomir zichligining kamayishi.

- Gormonal retseptorlar:  $ER\alpha$  yuqori, PR-B pasaygan, PR-A ustunligi → progesteron-rezistentlik.

- Reseptivlik markerlari: HOXA10, LIF, IGF1,  $\alpha\beta$ 3 darajasi pasaygan.
- Yallig'lanish va stress: IL-6, TNF- $\alpha$ , NF- $\kappa$ B, COX-2 oshgan; Nrf2 va HO-1 kamaygan.
- Korrelyatsiyalar: insulin-rezistentlik ↔ VEGF, NF- $\kappa$ B, Ki-67 ( $p < 0,01$ ).

Xulosalar

- Endometriy PTSYA da gormonal disbalans, surunkali yallig'lanish va oksidlovchi stress bilan tavsiflanadi.

- Progesteron-rezistentlik — asosiy patogenetik mexanizmdir.

- "Implantatsiya oynasi" buzilishi homiladorlik ehtimolini kamaytiradi va giperplaziya xavfini oshiradi.

- Morfofunktsional buzilishlarni tuzatish uchun kompleks yondashuv zarur.



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- o metformin + progesteron;
- o antioksidantlar (vitamin D, N-atsetilsistein, melatonin);
- o yallig'lanishga qarshi terapiya;
- o ERA yordamida individual implantatsiya oynasini aniqlash.

Ilmiy yangilik - O'zbek ayollari tanlovi asosida birinchi marotaba morfologik, immunogistokimyoviy va molekulyar ma'lumotlar taqqoslandi hamda metabolik buzilishlar (HOMA-IR) bilan NF- $\kappa$ B, VEGF, PR-B va HOXA10 ekspressiyasi o'rtasida bog'liqlik isbotlandi.

Amaliy ahamiyati - Olingan natijalar PTSYA bilan bog'liq bepushtlikni diagnostika va davolashni optimallashtirish, endometriy giperplaziyasi xavfini prognoz qilish va PR-B, HOXA10, Ki-67 kabi IHK-markerlardan foydalanish imkonini beradi.

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