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DESCRIPTION OF IMMUNOGISTOCHEMICAL CHANGES IN ENDOMETRIOSIS

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Abstract. In the study of the etio-pathogenesis of endometriosis, the study of the molecular-biological specificity of eutopic and ectopic endometrium - the expression of estrogen and progesterone receptors, proliferation, apoptosis, adhesion, angiogenesis, and cell invasion markers is one of the promising directions. The purpose of the work: to study the molecular-biological characteristics of adenomyosis and ovarian endometriosis in the proliferative phase of the menstrual cycle in women of reproductive age without other gynecological pathologies. Materials and methods: In this study, biopsies of premenopausal (18-51 years 60 biopsies) and postmenopausal women (age 51 and older, 20 biopsies) who underwent hysterectomy between 2019 and 2022 were examined by immunohistochemical methods. In this study, in 2019-22 AVPAB examined 80 adenomyosis and ovarian endometriosis biopsies, immunohistochemical examination of estrogen and progesterone hormonal activity disorders showed that in 60-90% of cases, progesterone, and in 50-70% of cases, estrogen hormone leads to the development of uterine adenomyosis and glandular hyperplasia of the uterus. atypical development of the endometrium and transition to a malignant tumor disease was observed. Ki-67 and p53 were shown in 20% of postmenopausal patients with the transition to the initial state of a low-grade tumor of the uterus.

Key words. endometriosis, adenomyosis, estrogen, progesterone, K67, r53, immunohistochemical tests.

Dolzarbligi. Endometriozda to'qimalarni geterotopiyasi, molekulyar genetik nuqsoni, apoptozni sekinlashuvi, biriktiruvchi to'qimali qobig'ini yo'qligi, maxalliy aseptik reakstiyani mavjudligi va immunkompetent hujayralarni disfunkstiyasi kuzatiladi [1, 2, 5].

Endometriozni etio-patogenezini o'rganishda eutopik va ektopik endometriyaning molekulyar-biologik o'ziga xosligi-esterogen va progestoron resteptorlarini ekspressiyasi, proliferastiyasi, apoptozi, adgeziyasi, angiogenezi, hujayra invaziyasi markerlarini o'rganish perspektiv yo'nalishlardan hisoblanadi [1, 3,4, 6,7,8].

Ishning maqsadi. Reproduktiv yoshdagi ayollarda boshqa ginekologik patologiyalarsiz xayz davrining proliferativ bosqichidagi adenomioz va tuhumdon endometriozidagi molekulyar-biologik xususiyatlarini o'rganish.

Material va uslublar. Ushbu tadqiqotda 2019-2022 yillar mobaynida gisterektomiya qilingan menopauzagacha (18-51yosh 60-ta bioptat) va postmenopauza davridagi ayollar bioptatlariga (51 va undan katta yoshdagilar, 20-ta bioptat) immunogistokimyoviy usullarda tekshirildi. Barcha bemorlar reproduktiv yoshda, buzilmagan xayz davrining proliferativ bosqichida bo'lgan. Immunogistokimyoviy tekshiruvga Bond Leica Australia (Avstraliya) immunogistoprostessordan foydalangan holda Ki67 va r53 ekspressiyasi, estrogen va progesteron gormonlari biomerkerlari ekspressiyasi o'rganildi, bunda musbat bo'yalgan hujayralar % bilan hisoblanib, proliferativ indeksi sifatida baholandi. Hujayralarni bo'yalish intensivligi (yoki ularni yadrolari - Ki - 67 oqsili, estrogen resteptorlari va progesteron resteptorlari uchun) vizual ravishda 0 dan 3 gacha (salbiy, zaif, o'rtacha bo'yalgan) ball bilan baholandi va ijobiy bo'yalgan hujayralar % har bir ko'rsatkichni intensivligi qiymatida hisoblandi.

Natijalar. Menopauzagacha bo'lgan davrdagi ayollarda esterogen resteptorlari ekspressiyasi o'rganilganda: adenomiozlarda - stroma hujayralarida, tuhumdon endometriozlarida esa epiteliy va stroma hujayralarida miqdorini nazorat guruhiga nisbatan kam bo'lishi qayd etildi. Menopauzagacha bo'lgan davrdagi 10ta bemorlarni estrogen reagenti orqali olingan natijalar shuni ko'rsatdiki 8ta bemorlarda (80%) estrogen resteptori pozitiv reakstiya jarayoni kuzatildi. 2 ta (20 %) bemorda negativ reakstiya kuzatildi (diagramma-1,2).

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Diagramma-1

Endometriyning proliferastiya fazasida adenomioz va tuhumdonlar endometriozlarida esterogen resteptorlari ekspressiyalanishi

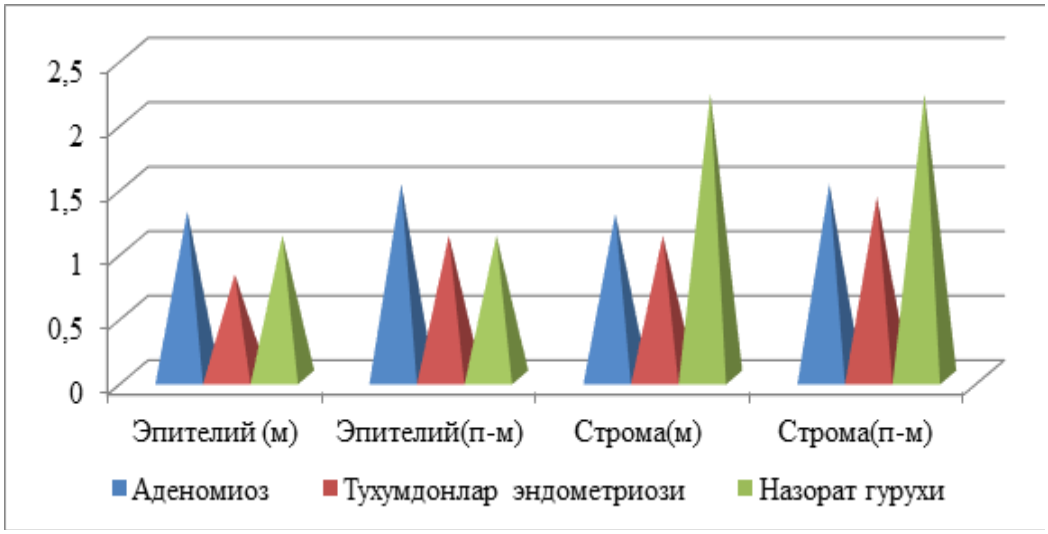
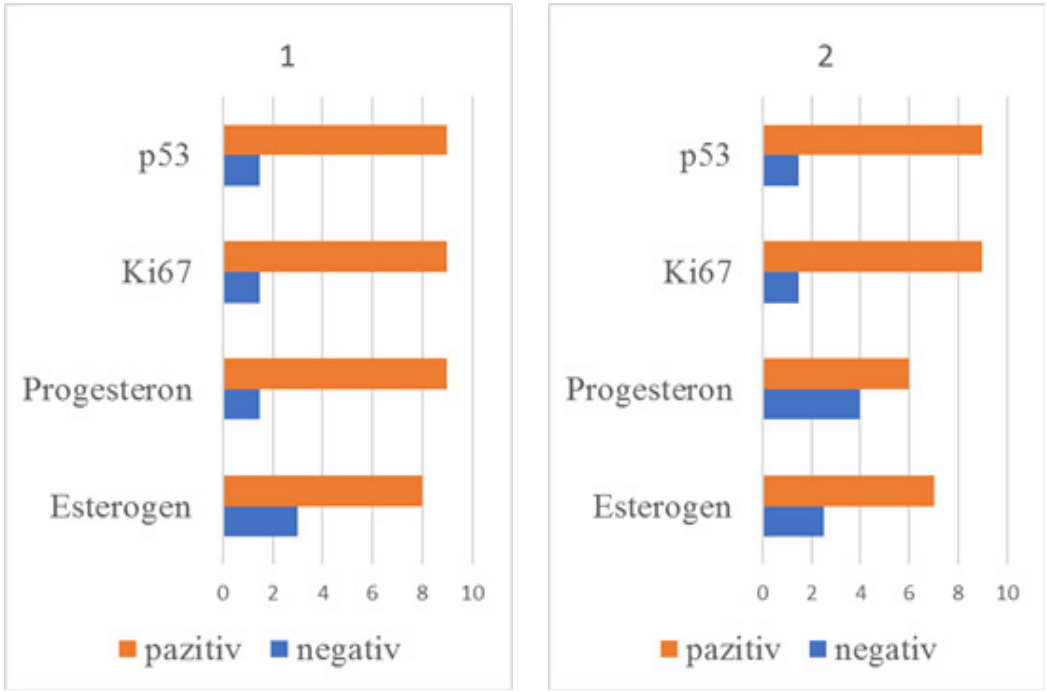
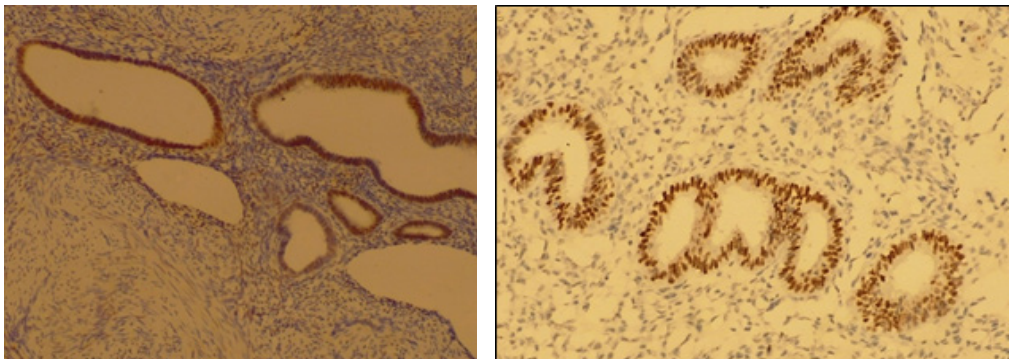


Diagramma-2

Menopauzagacha (1) va menopauzadan keyingi (2) davrlarda bachadon adenomiozi va tuhumdonlar endometriozlarida estrogen, progesteron, K67 reagentlarining proliferativ faollik darajasi



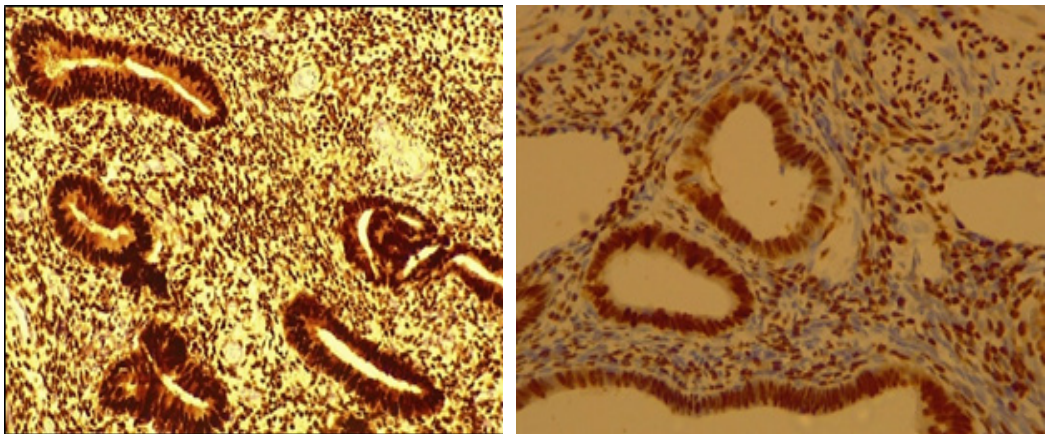


Rasm-1. Endometriyning proliferastiya fazasida adenomiozdagi epiteliy yadrosi va stromasida esterogen resteptorlarini ekspressiyasi. 2.Tuhumdonlar endometriozlarida estrogen reagentining pozitiv reakstiyasi. IGX – Dab xromagen. Ob10xok40

Mikroskopik ko'rinishi bo'yicha miometriydagi adenomioz (endometriya bezlarini proliferastiyasi), bezlar atrofida limfoid folikulalar proliferastiyasi va yallig'lanish o'choqlari mavjudligi bilan namoyon bo'ldi. Bezlari o'lchamlari turli ko'rinishda bo'lib, proliferastiyalangan, giperplaziyaga uchragan epiteliy, asosan bir qatorli bo'lib, immunogistokimyoviy tekshirishlarda yadrolari to'q jigarrang rangga bo'yaldi (rasm-1).

Menopauzagacha bo'lgan davrdagi bemorlarda adenomioz va tuhumdonlar endometriozida progesteron resteptorlari ekspressiyasi nazorat guruhida epiteliyda nisbatan yuqori, stromasida esa nazorat guruhi bilan bir xil ko'rsatkichda namoyon bo'ldi, natijalar 9ta bemorlarda (90%) pozitiv reakstiya, 1 ta (10%) bemorda negativ reakstiya kuzatildi (diagramma 2,3).

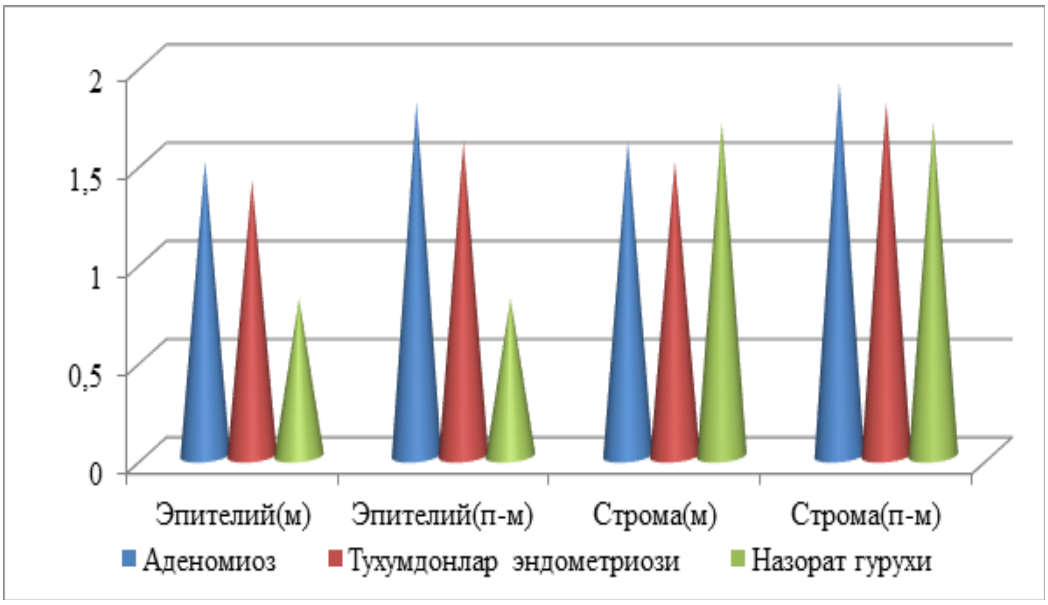
Immunogistokimyoviy ko'rinishi bo'yicha esterogen resteptorlari ekspressiyasi epiteliy hujayralariga nisbatan, progesteron resteptorlari ekspressiyasi esa stromada ekspressiyalanishi pasayishi bilan namoyon bo'lib, adenomiozda miometriyda endometriya bezlarini proliferastiyasi, giperplaziyasi, bezlar atrofida limfoid hujayralarini proliferastiyasi va yallig'lanish o'choqlari mavjudligi bilan birga kuzatildi. Bezlari o'lchamlari turli ko'rinishda bo'lib, immunogistokimyoviy tekshirishda endometriya bezlari giperplaziyalanib, asosan bir qatorli va yadrolari to'q jigarrang rangga bo'yalganligi aniqlandi (rasm-3).



Rasm-2. 1.Bachadon adenomiozida miometriyda endometriyaning bezlarini proliferastiyasi, giperplaziyasida progesteron resteptori pozitiv reakstiyasi. 2.Proliferastiya fazasida tuhumdonlar endometriozlari endometrioid o'chog'larida epiteliy yadrosi va stromasida progesteron resteptorlari ekspresssiyasi: epiteliyda ekspressiyani ustunlik sohalari. IGX – Dab xromagen. Ob10x. ok40.

Diagramma-3

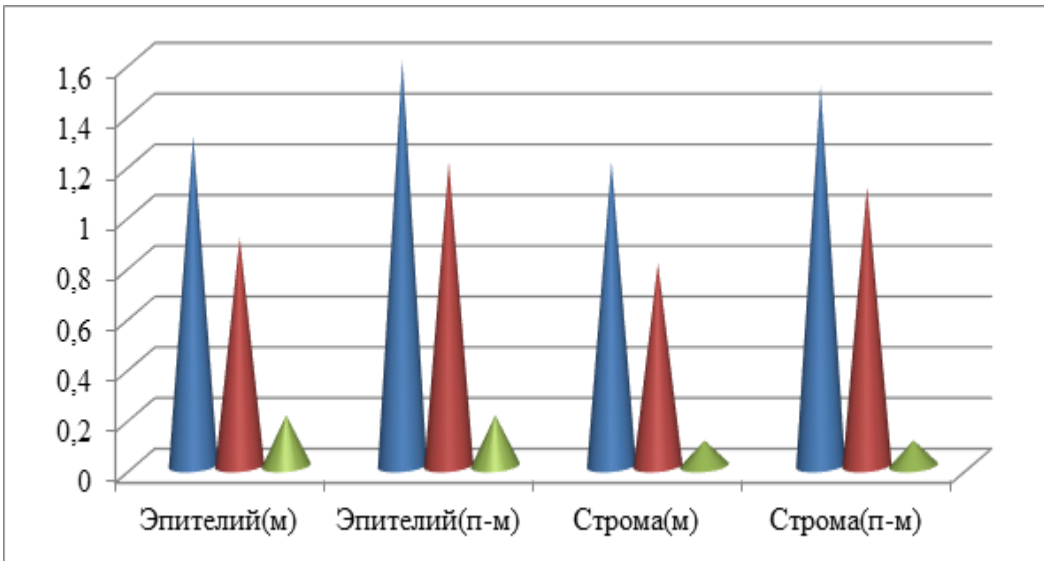
Endometriyning proliferastiya fazasida adenomioz va tuhumdonlar endometriozlarida progesteron resteptorlari ekspressiyalanishi



Izox: m-menopauzagacha bo'lgan davr, p-m postmenopauzadan keyingi davr.

Diagramma-4

Endometriyning proliferastiya fazasida adenomioz va tuhumdonlar endometriozlarida Ki – 67 ekspressiyasi koeffistienti

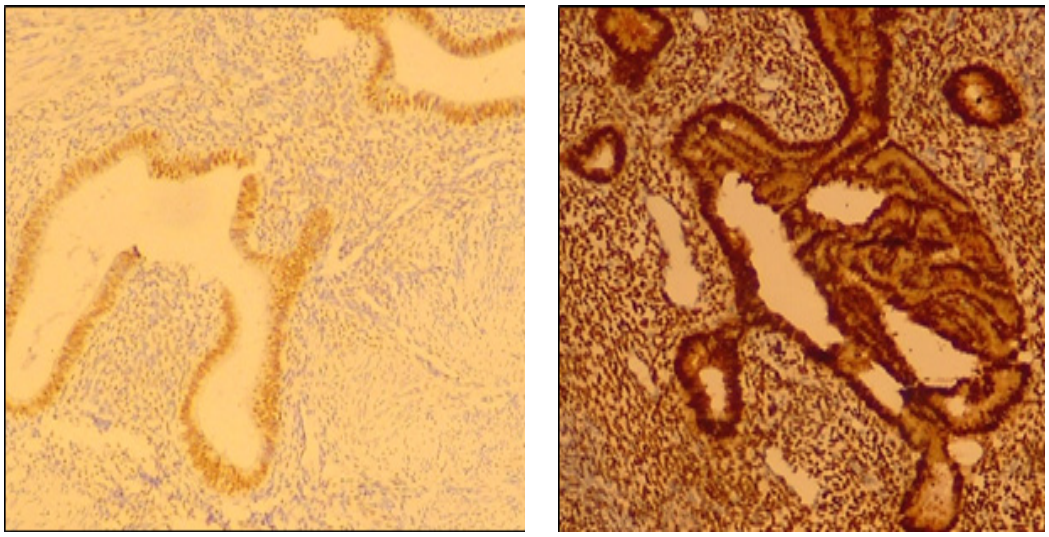


Izox: m-menopauzagacha bo'lgan davr, p-m postmenopauzadan keyingi davr.

Menopauzacha bo'lgan davrdagi ayollar adenomiozida Ki-67 ekspressiyasi koeffistienti adenomioz epiteliysida nazorat guruhi bilan bir xil, stromasida esa past, tuhumdonlar endometriozi o'chog'ida epiteliy va stromasida nazorat guruhida ko'rsatkichidan past natijani namoyon qildi, natija 9tasida engil darajali (5-10 %), 1tasida (10-20%) o'rta faollik holati kuzatildi (diagramma-2,4).

Adenomioz va tuhumdonlar endometriozlari epiteliysi va stromasi nazorat guruhi ko'rsatkichlariga nisbatan kamroq bo'lishi qayd etildi.

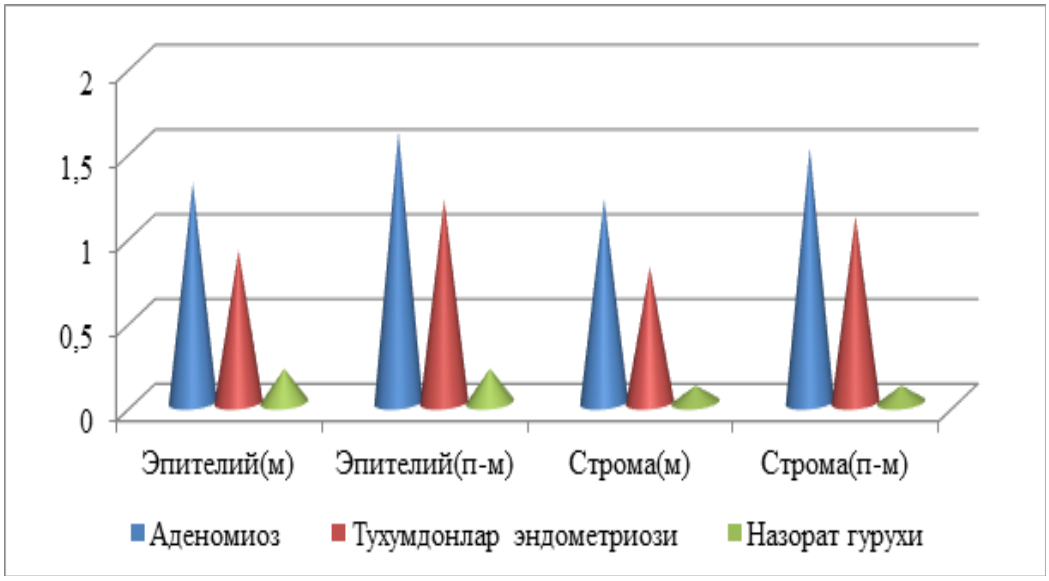
Immunogistokimyoviy ko'rinishi bo'yicha adenomiozda endometriya giperplaziyasi, bezlar atrofida limfoid folikulalar proliferastiyasi va yallig'lanish o'choqlari mavjudligi kuzatildi. Bezlari o'lchamlari turli ko'rinishda giperplaziyaga uchragan, asosan bir qatorli, immunogistokimyoviy ko'rinishda endometriya bezlari giperplaziyalanishi va yadrolari to'q jigarrang rangga bo'yalishi aniqlandi (rasm-3).



Rasm-3. 1.Bachadon adenomiozida endometriya bezli giperplaziyasining Ki – 67 ekspressiyasi koeffistientini o'rta darajali pozitiv reakstiyasi. 2.Bachadon adenomiozida endometriyaning atipik giperplaziyasida r53 reagentning pozitiv reakstiyasi. Epiteliy va stromal hujayralarda apoptoz ingibitorlari ekspressiyasi. IGX – Dab xromagen. Ob10. Ok40.

Diagramma-5

Endometriyning proliferastiya fazasida adenomioz va tuhumdonlar endometriozlarida apoptoz ingibitori ekspressiyasi

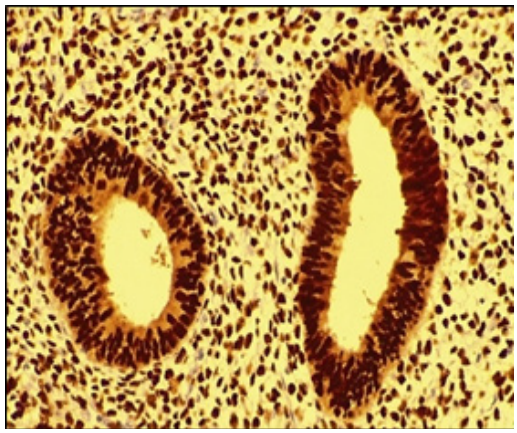


Izox: m-menopauzagacha bo‘lgan davr, p-m postmenopauzadan keyingi davr.

Menopauzagacha bo’lgan davrdagi ayollar bachadon adenomiozi r53–o’sma oqsili ekspressiyasi natijasi 1tasida (10 %) pozitiv reakstiya, 9tasida (90%) negativ reakstiya holati kuzatildi (4 -rasm).

Adenomioz va tuhumdonlar endometriozlarida apoptoz ingibitorlari ekspressiyasi epiteliy va stromasida nazorat guruhiga nisbatan baland ko’rsatkichni namoyon qildi.

Immunogistokimyoviy ko’rinishi bo’yicha bachadon endometriya to’qimasining kistoz shakldagi polimorfizm ko’rinishdagi atipik hujayralarga ega giperplaziyasi, hujayra yadrolarini to’q jigarrang rangga bo’yalishi adenomiozda bachadon bezli giperplaziyasining xavfli o’sma kasalligiga o’tganligidan dalolat beradi.



Rasm-4. 1.Bachadon adenomiozida endometriyaning bezli giperlaziyada estrogen reagentining pozitiv reakstiyasi. 2.Bachadon adenomiozida endometriyaning bezli giperplaziyasida progesteron resteptorlarini pozitiv reakstiyasi. IGX – Dab xromagen. Ob10xok40.

Postmenopauza davrida estrogen reagenti orqali olingan natijalar 7 tasida (70%) pozitiv reakstiya, 3 tasida (30%) negativ reakstiya kuzatildi (diagramma-2, 5).

Mikroskopik ko’rinishi bo’yicha adenomiozli endometriya giperplaziyasida bezlari o’lchamlari turli ko’rinishda giperplaziyaga uchragan, asosan bir qatorli, immunogistokimyoviy ko’rinishda yadrolari to’q jigarrang rangga bo’yalganligi bilan namoyon bo’ldi (rasm-4).

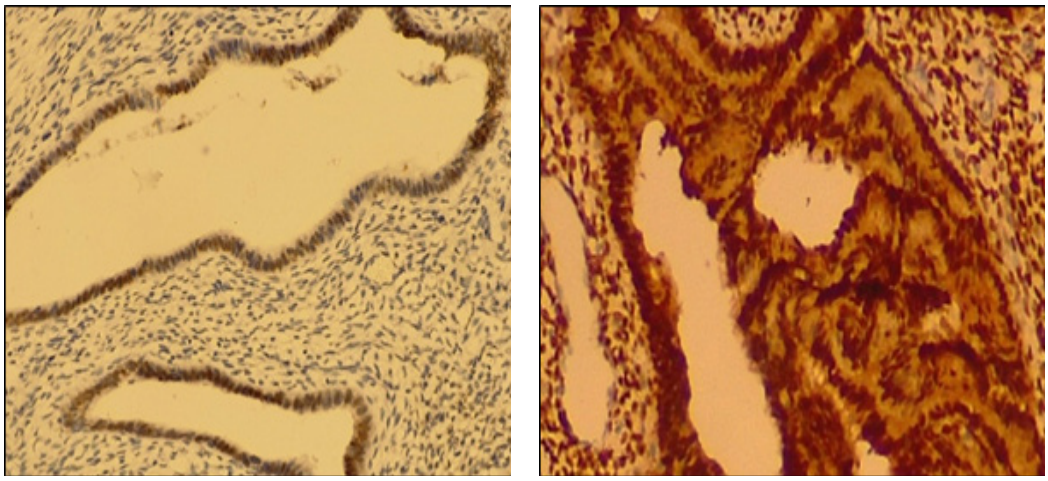
Postmenopauza davrida progesteron reagenti natijalar 6 ta bemorlarda (60%) pozitiv reakstiya, 4ta bemorda (40%) negativ reakstiya kuzatildi.

Immunogistokimyoviy ko’rinishi bo’yicha adenomiozda endometriy giperplaziyasi

bezlari o'lchamlari turli ko'rinishda giperplaziyaga uchragan, asosan bir qatorli, immunogistokimyoviy ko'rinishda endometriya bezlari giperplaziyalangan va yadrolari to'q jigarrang rangga bo'yalganligi kuzatildi.

Postmenopauza davrida Ki 67- hujayralar proliferativ faolligi natijasi 8 tasida engil darajali (5-10%), 2 tasida (10-20%) o'rta faollik holati kuzatildi (diagramma-5).

Immunogistokimyoviy ko'rinishi bo'yicha adenomiozda endometriy giperplaziyasi, bezlar atrofida limfoid folikulalar proliferastiyasi va yallig'lanish o'choqlari mavjudligi kuzatildi. Bezlarni o'lchamlari turli ko'rinishda giperplaziyaga uchraganligi, asosan bir qatorli, immunogistokimyoviy tekshirishlarda bezlar giperplaziyasi va yadrolarini to'q jigarrang rangga bo'yalishi qayd etildi (rasm-4).



Rasm-4. 1.Bachadon adenomiozida endometriy bezli giperplaziyasining Ki – 67 yuqori darajali pozitiv reakstiyasi. 2.Bachadon adenomiozida endometriyaning atipik giperplaziyasida r53 reagentning pozitiv reakstiyasi. IGX – Dab xromagen. Ob10. Ok40.

r53 – o'sma oqsili postmenopauza davrida gistologik va immunogistokimyoviy tekshiruv natijalarida 2ta bemorda adenomioz tashxisi bilan jarrohlik amaliyoti o'tagan bemorlar bachadonning boshlang'ich yomon sifatli o'sma holatiga o'tganligi namoyon bo'ldi, natijalar 2tasida (20%) pozitiv reakstiya, 8tasida (80%) negativ reakstiya holati kuzatildi (rasm-4).

Hulosa: Olingan natijalardan shuni ko'rsatadiki immunogistokimyoviy tekshiruv orqali ayollarda estrogen va progesteron gormonal faoliyatni buzilishi 60-90% xollarda progesteron, 50-70% hollarda estrogen gormoni bachadon adenomiozi rivojlanishda va bachadonning bezli giperplaziyasiga olib keladi, buni natijasida bemorlarda bachadon endometriysini atipik rivojlanishi va havfli o'sma kasalligiga o'tishi kuzatildi. Ki-67 va r53 postmenopauzada davridagi 2 ta bemorda bachadonning boshlang'ich yomon sifatli o'sma holatiga o'tganligi bilan namoyon bo'ldi.

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