Жамият ва инновациялар –
Общество и инновации –
Society and innovations
Journal home page:
https://inscience.uz/index.php/socinov/index

Study of clinical and morphological features of different forms of endometrioid disease

Gulbakhor JURAEVA [1]

Bukhara Medical Institute

ARTICLE INFO

Article history:
Received February 2021
Received in revised form
20 February 2021
Accepted 15 March 2021
Available online
5 April 2021

Keywords:
the occurrence of endometriosis,
ovarian endometriosis,
adenomyosis,
clinical and morphological variants,
reproductive age.

ABSTRACT

The frequency of occurrence and morphological forms of the endometrioid disease in 148 women of reproductive age were studied at the Bukhara pathoanatomical bureau sent from the republican emergency center to the department gynecology of the Bukhara branch. The material for the study was operating materials. Histological preparations were examined under a light microscope, and the critical areas were photographed.

Morphometric studies of adenomyosis and endometriosis tissue were studied under a Leyka microscope using Avtandilov's grid, the ratio of parenchyma and glandular components. According to the study results, the following changes were identified: histologically, both in the myometrium and in the ovaries, endometrioid foci were determined, which penetrated to different depths. The lesions had two components: stromal and glandular structures. The ratio of these components varied depending on the type of these nodes.

An endometrioid ovarian cyst was found in 49 patients, retrocervical endometriosis in 24 women, uterine adenomyosis in 15, and a combination of various localization of endometrioid lesions in 60 patients.

Thus, analysis of the results of morphological studies of micro preparations of different histological variants of endometrioid disease demonstrates a significant degree of uneven distribution of tissue components and structures in different observation cases. Various forms of adenomyosis and endometriosis must be considered when choosing rational tactics for managing patients in the postoperative period to prevent relapse. Endometriosis of the uterus and ovary is characterized by a long asymptomatic or oligosymptomatic course followed by the rapid development of the clinical picture and the appearance of indications for surgical treatment. In this case, the main indications are pain syndrome

[1] Associate Professor, Candidate of Medical Sciences, Head of the Department of Pathological Anatomy Bukhara Medical Institute, Bukhara, Uzbekistan.
e-mail: gjuraeva20@gmail.com

(100%) combined with hypermenstrual syndrome (55.7%), accompanied by rapid growth in every second patient, and anemia in every third patient.

Эндометриоид касаллигининг турли хил шаклларининг клиник ва морфологик хусусиятларини ўрганиш

Калит сўзлар:
эндометриоз пайдо бўлиш частотаси,
бачадон эндометриози,
аденомиоз,
клиник ва морфологик вариантлар,
репродуктив ёш.

АННОТАЦИЯ

Республика шошилинч гинекология бўлимининг Бухоро филиалидан патологик анатомия бюросига эндометриоид касаллиги билан касалланган 148 та репродуктив ёшдаги аёлларнинг юборилган операцион материаллари ўрганилди. Тадқиқот учун биопсия материаллари олинган. Гистологик препаратлар ёруғлик микроскопида текширилиб керакли жойлар расмга олинди.

Аденомиоз ва эндометриозда тўқиманинг морфометрик хусусиятлари Leyka микроскопида Автандилов сеткасидан фойдаланилган ҳолда, паренхима ва строма элементларининг нисбати ўрганилди. Тадқиқот натижаларига кўра қуйидаги ўзгаришлар аниқланди: гистологик жиҳатдан ҳам миометрийга, ҳам эндометрийга турли чукурликда кириб борган эндометриоид ўчоклар аниқланди. Ўчоқлар иккита таркибий қисмга: яъни стромал ва безли тузилишга эга. Эндометриознинг турига қараб ушбу компонентнинг таркибий қисми ўзгариб турарди. Касалларнинг 49 тасида эндометриоид тухумдон кистаси, 24 аёлда ретроцервикал эндометриоз, 15 тасида бачадон аденомиози ва 60 беморда эса эндометриоид тугунларнинг турли комбинацияси аниқланди.

Шундай қилиб, эндометриоид касаллигининг турли хил гистологик вариантларини морфологик таҳлил килиш натижалари турли кузатув ҳолатларида тўқима таркибий қисмлари ва тузилмаларнинг нотекис тақсимланганлигини кўрсатди. Операциядан кейинги даврда асоратларни олдини олишда аденомиоз ва эндометриозни турли шаклларини мавжудлигини беморларни бошқаришда оқилона тактикани танлашни тақозо этади. Бачадон ва тухумдоннинг эндометриози узоқ вакт симптомсиз ва кам симптомлар билан кечиб, сўнгра тез ривожланадиган ва жарроҳлик амалиёти учун кўрсатма пайдо қиладиган патология эканлиги аниқланди. Бунда беморларда асосий кўрсаткичлар (100%) ҳолатларда оғрик синдроми, (55,7%) ҳолатларда гиперменструал, ҳар иккита беморда тугунларнинг тез ўсиши ва ҳар учинчи беморда камқонлик белгилари билан намоён бўлди.

Изучение клинико-морфологических особенностей различных форм эндометриоидной болезни

Ключевые слова:
частота возникновения эндометриоза,
ндометриоз яичников,
аденомиоз,
клинико-морфологические варианты,
репродуктивный возраст.

АННОТАЦИЯ

Изучены частота встречаемости и морфологические формы эндометриоидной болезни у 148 женщин репродуктивного возраста в Бухарском патологоанатомическом бюро направленное из республиканского экстренного неотложного центра отделении гинекологии Бухарского филиала. Материалом для исследования служили взятые биопсии. Гистологические препараты изучали под световым микроскопом и фотографировали необходимые участки.

Морфометрические исследования ткани аденомиоза и эндометриоза изучали под микроскопом Leyka с помощью сетки Автандилова соотношение паренхимы и железистых компонентов. По результатам исследования были выделены следующие изменения: гистологически, как в миометрии так и в яичниках, определили эндометриоидные очаги, которые проникли на различную глубину. Очаги имели в себе два компонента: стромальные и железистые структуры. Соотношение этих компонентов варьировали в зависимости от вида этих узлов.

У 49 больных обнаружено эндометриоидная киста яичника, у 24 женщин ретроцервикальный эндометриоз, у 15 аденомиоз матки, а у 60 больных сочетание различных локализации эндометриоидных поражений.

Таким образом, анализ результатов морфологических исследований микропрепаратов разных гистологических вариантов эндометриоидной болезни демонстрирует значительную степень неравномерностям распределения тканевых компонентов и структур в разных случаях наблюдения. Существование различных форм аденомиоза и эндометриоза необходимо учитывать при выборе рациональной тактики ведения пациенток в послеоперационном периоде для профилактики рецидивов. Для эндометриоза матки и яичника, характерно длительное бессимптомное или малосимптомное течение с последующим быстрым развитием клинической картины и появлением показаний для хирургического лечения. При этом основными показаниями являются: болевой синдром (100%) в сочетании с гиперменструальным синдромом (55.7%), сопровождающиеся у каждой второй пациентки быстрым ростом, у каждой третьей – анемией.

THE AIM OF THE RESEARCH

Conduct a clinical and morphological analysis of ovarian endometriosis and adenomyosis, taking into account its various variants and morphofunctional forms.

MATERIALS AND METHODS

The morphological forms of adenomyosis and endometriosis of the ovaries were studied in 148 women of reproductive age in the Bukhara Patho-anatomical bureau sent from the Republican Emergency Center to the Department of Gynecology of the Bukhara branch. The material for the study was operating materials. For general morphology, 3 pieces were excised from each endometrioid node that was, 1.5 × 1.5 cm from the center, middle and peripheral parts, and solidified in 10% neutral formalin. After washing for 2–4 h in running water, it was dehydrated in concentrated alcohol and chloroform, then embedded in paraffin and prepared blocks. On paraffin blocks, sections of 5-8 μm were cut, stained with hematoxylin and eosin. Semi-thin 1 μm sections were obtained from Epon bricks on a Leyka ultramicrotomy. Histological preparations were examined under 10, 20, 40 lenses of a light microscope and the necessary areas were photographed.

RESULTS AND DISCUSSION

Surgery materials of 148 female patients of reproductive age without other gynecological diseases with various localizations of genital endometriosis, removed during surgical operations, were examined. The average age of patients was 36.8 ± 0.74 years, 40% of patients were under the age of 35; 41% - from 36 to 45 years old; 22.2% - over 46 years old. Women were hospitalized on an emergency basis. Upon admission to the clinic, the examined women indicated complaints related to various manifestations of pain syndrome and menstrual irregularities. Periodic pain was indicated by 52.6% of patients, severe pain during the menstrual cycle was in 21.4% of patients, and pain before the menstrual cycle was noted by 5.7% of women. Indications for surgical treatment were: ovarian cystoma, uterine adenomyosis, a combination of adenomyosis with uterine myoma and menstrual irregularities by the type of hyperpolymenorrhea. Scope of surgical interventions - supravaginal amputation of the uterus without or with appendages, extirpation of the uterus without or with appendages and removal of endometriotic ovarian cysts. The removed preparations were carefully examined; the sizes of the uterus, the thickness of the endometrium and ovaries, and the thickness of the endometrium and ovaries were measured. The presence of macroscopically visible pathological areas was determined. In macroscopic examination, the uterus was enlarged in all cases. This is associated with both the growth of uterine fibroids and the shape and activity of foci of adenomyosis. In focal adenomyosis, thickening of one or several walls of the uterus was observed, in diffuse, the myometrium was thickened throughout. The nodular variant did not have a capsule, with indistinct boundaries of intramural nodules of various sizes. The incidence of different forms of endometriosis was also studied.

Table 1. The incidence of different forms of endometriosis

Forms	Number of women
Endometrioid ovarian cyst	49(68 %)
Retrocervical endometriosis	24(24%)
Adenomyosis of the uterus	15(26%)
Combination of different localization of endometriotic lesions	60(74%)

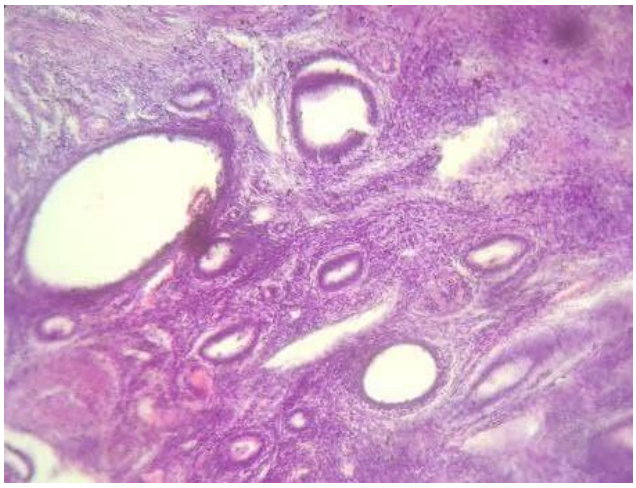

Fig. № 1. Glandular structures of various shapes, sizes from small with a narrow lumen to larger ones, endometrial hyperplasia and dilated venules. Staining with hematoxylin and eosin. 10x10.

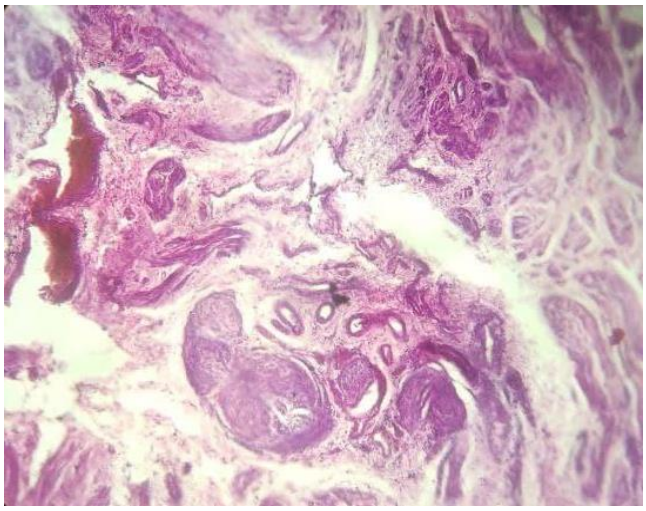

Fig. № 2. Penetration of the basal layer of the endometrium into the myometrium. Staining with hematoxylin and eosin. 10x10.

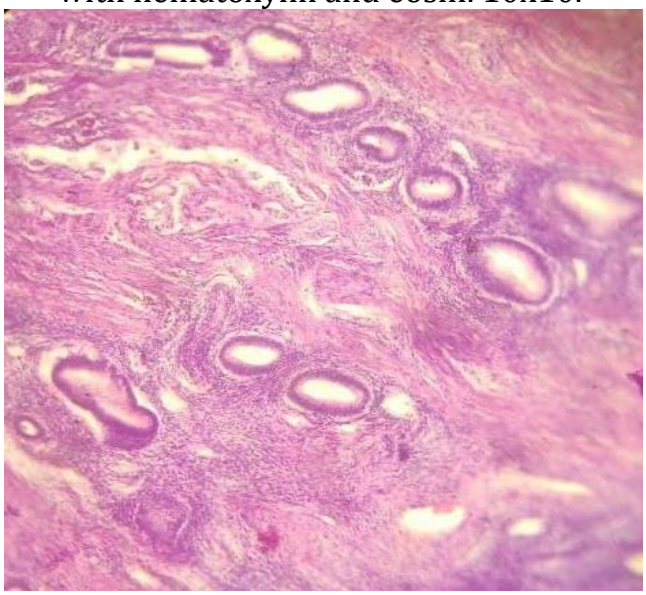

Fig № 3. Adenomyosis of the uterus, endometrial glands with the surrounding cytogenetic stroma is located in the myometrium. Staining with hematoxylin and eosin. 10x10.

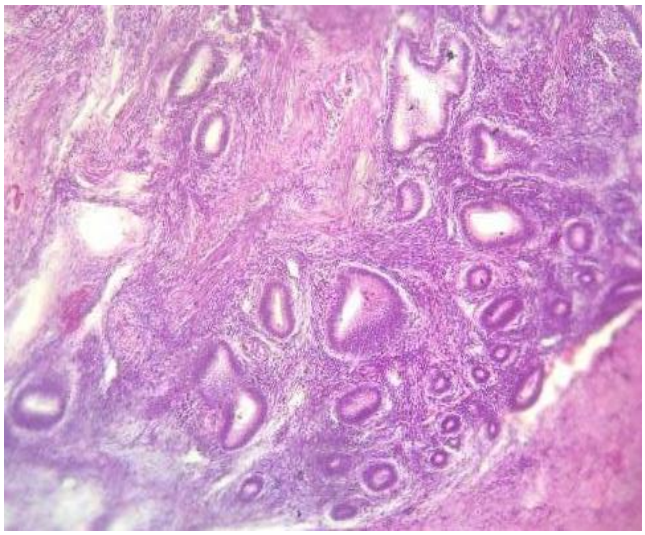

Fig. № 4. Adenomyosis of the uterus, cystic altered glands of the endometrial type with the surrounding cytogenetic stroma located in the myometrium. Stained with hematoxylin and eosin. 10x10.

Histologically, both in the myometrium and in the ovaries, endometrioid foci were determined, which penetrated to different depths. The lesions had two components, both stromal and glandular structures: the ratio of these components varied depending on the types of these nodes. In active adenomyosis, the glandular component was 33.4 ± 17.4%, the share of the stromal was -66.5 ± 16.4 %, not significantly differing from inactive foci - the proportion of the glandular component and the stromal, respectively (36.5 ± 11.4% and 63.4 ± 11.4% at p = 0.14 and 0.32).

Thus, the results of morphological studies had shown that endometriosis in women was one of the most common pathologies. The existence of various forms of ovarian

endometriosis and adenomyosis should be taken into account when choosing a rational tactics for managing patients in the postoperative period to prevent relapse.

CONCLUSION

In patients with endometriosis against the background of inflammatory processes, the syndrome of chronic pelvic pain, various mono and multiple organ pathologies was most often observed. Endometriosis of the uterus and ovary was characterized by a long-term asymptomatic or low-symptom course, followed by a rapid development of the clinical picture and the appearance of indications for surgical treatment. In this case, the main indications were: pain syndrome (100%) in combination with hyper menstrual syndrome (55.7%), accompanied by every second patient grows rapidly, every third had anemia.

REFERENCES:

1. Adamyan L.V., Kulakov V.I., Andreeva E.N., Endometriosis (Moscow: Medicine), 2nd ed. 2006; p. 416.

2. Adamyan L.V Clinic, diagnosis and treatment of genital endometriosis // Obstetrics and gynecology, 1992. No. 7. - p. 5-10.

3. Use of Nemestran in the treatment of patients after laparoscopic removal of endometrioid cysts / Adamyan L. V. et al. // Endoscopy in the diagnosis and treatment of uterine pathology (with a course of endoscopy): Mater, Intern. Congress. M., 1997.-4.2. - pp. 15-37.

4. Adamyan L.V. Laparoscopy and laparotomy in the diagnosis and treatment of ovarian formations / Adamyan L. V., Beloglazova S. E. // Endoscopy in gynecology: Mater, scientific. editions. M., 1999 .-- pp. 375-388.

5. Adamyan L.V. Genital endometriosis: etiopathogenesis, clinical picture, diagnosis, treatment: Methodological guide for doctors / Adamyan LV, Andreeva E.M, 2001. – p. 35.

6. Genital endometriosis: the role of endoscopic methods and hormone therapy in diagnostics, treatment, monitoring / Adamyan L.V et al. // Laparoscopy and hysteroscopy in gynecology and obstetrics: Mater, scientific. editions. M .: Pantori, 2002.- pp. 75-87.

7. Adamyan L.V Genital endometriosis. Modern view of the problem / Adamyan L.V., Gasparyan S.A. Stavropol: SGMA, 2004.- p. 228.

8. Andreeva E.N Common forms of genital endometriosis: medico-genetic aspects, diagnosis, clinic, treatment and monitoring of patients: Dis. for a job. learned, Doct. Med. Sciences. M., 1997 .- p. 333.

9. Balakshina N.G Laparoscopic surgery in patients with small forms of endometriosis with infertility / Balakshina N.G, Soklakova I.V, Koh L.I // Endoscopy in gynecology: Mater, scientific. editions. M., 1999 .-- pp. 361-363.

10. Baskakov V.P Clinic and treatment of endometriosis. L .: Medicine, 1990. p. 240.

11. Baskakov V.P Diagnostics and treatment of endometriosis at the present stage: A manual for doctors / Baskakov V.P, Tsvylev Yu. V., Kira E.F SPb, 1998. – p. 33.

12. Bobkova M.V Clinical and morphological features of external genital endometriosis: Dis. for a job. Learned, Cand. Med. Sciences. -M., 1995.- p. 174.

13. Comparative effectiveness of various methods of treating infertility in patients with external genital endometriosis / Volkov N.I et al. // Journal of Obstetrics and Women's Diseases, 2001. T. 50. - No. 3. - pp. 25-27.

14. Gadaeva I.V Possibility of endoscopic methods of treatment of patients with common forms of endometriosis / Gadaeva I.V, Ishchenko A.I, Kudrina E.A // Endoscopy in gynecology: Mater, scientific. editions. M., 1999 .- pp. 358-359.

15. Gynecology according to Emil Novik / ed. J. Bereke, I. Arkashi and P. Hillard / Transl. from English M .: Practice, 2002 .- p. 896.

16. Gorbushin S.M Peritoneal endometriosis and infertility: clinical and morphological parallels: author. Dis. for a Job. Learned, Cand. Med. Sciences. –S.Pb., 1996.18 p.

17. Gorokhov A.P Endometrioid ovarian cysts, frequency, features of surgical treatment / Gorokhov A.P, Lazarev I.P // Scientific Bulletin of Tyumen. Medic. Acad. Tyumen, 2001. - No. 1. -pp. 108-109.

18. Grishchenko V. I. Magnetic resonance imaging and dopplerometry in obstetrics and gynecology / Grishchenko V. I. et al. // Intern. Medic. Magazine, 1998. T. 4. - No. 3.- pp. 23-26 to. 87.

19. Adamson G. D. Laparoscopic CO-2 laser vaporization of endometriosis / Adamson G.D., Lu J., Subak L. L. // Fertil. Steril., 1988. Vol. 50. - № 5. - pp. 704-710.

20. Ahmed M. S. Reoperation rates for recurrent ovarian endometriomas after surgical excision / Ahmed M. S., Barbieri R. L. // Gynec. and Obstet. Investigation, 1997. Vol. 43. - P. 53-54.

21. The role of transvaginal ultrasonography combined with velocity imaging and pulsed Doppler in the diagnosis of endometrioma / Alcazar J. L. et al. // Fertil. Steril., 1997. -Vol. 67. -№3.-pp. 487-491.