Adenokarcinom endometrija pri mladi ženski

Endometrial cancer in young woman

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Pap smear, atypical endometrial cells, endometrial adenocarcinoma, young patients

Izvleček

Namen: *Rak endometrija je pogosto maligno obolenje, za katerega učinkovita presejalna metoda ne obstaja. Odkrijemo ga večinoma takrat, ko se pojavijo simptomi. Obolevajo starejše ženske. Pri mladih ženskah pred 40. letom je ta bolezen izjemno redka, zato še toliko manj pomislimo nanjo, še posebej, če je ženska brez simptomov. Kadar so v brisih materničnega vratu vidne endometrijske celice, jih opišemo in analiziramo, je pa občutljivost in pozitivna napovedna vrednost Pap testa v odkrivanju raka endometrija nizka.*

Poročilo o primeru: *Predstavljamo primer 30-letne ženske, ki razen nerednih menstruacij ni imela ginekoloških težav, bila pa je prekomerno prehranjena. Na rednem preventivnem pregledu je bil odvzet tudi bris materničnega vratu, v katerem so bile prisotne atipične endometrijske celice, sumljive za karcinom. Z UZ preiskavo so ugotovili policistična jajčnika, endometrij pa je bil zadebeljen. Po frakcionirani abraziji in histološkem pregledu je bila postavljena*

Abstract

Purpose: *Endometrial cancer is a common malignant disease for which there is no cost-effective early detection screen. Endometrial cancer primarily affects older women and is usually diagnosed after symptoms occur. This malignancy is extremely rare in women younger than 40-years-old, so it is rarely considered, especially in asymptomatic cases. Endometrial cells should be evaluated and reported in cervicovaginal smears, but the sensitivity and positive predictive value of Pap tests for the detection of endometrial carcinoma is low.*

Case report: *This is a case report of a 30-year-old asymptomatic woman who was invited for regular cervical cancer screening and had irregular menstrual periods and was overweight. A Pap test revealed atypical endometrial cells, suspicious for carcinoma. Polycystic ovaries and a thickened endometrium were diagnosed following ultrasound investigation. Endometrial biopsy was performed, and endometrioid adeno-*

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diagnoza endometrioidnega adenokarcinoma. Opravljena je bila histerektomija z odstranitvijo obojestranskih adneksov in pelvična limfadenektomija. Dokončni histološki izvid je potrjeval dobro diferencirani endometrioidni adenokarcinom z invazijo 2 mm v miometrij.

Zaključek: *Čeprav je rak endometrija bolezen starejših, lahko za njim zbolijo tudi mlajše ženske. Prisotnost atipičnih endometrijskih celic v brisih maternicnega vratu nam je lahko v veliko pomoč pri njegovem odkrivanju in terja natančno diagnostično obdelavo. Zavedati pa se moramo, da normalen bris ne izključuje te bolezni.*

carcinoma was diagnosed. The patient underwent total hysterectomy with bilateral salpingo-oophorectomy and pelvic lymphadenectomy. Pathological examination showed well differentiated adenocarcinoma of endometrioid type with 2 mm of myometrial invasion.

Conclusions: *Although rare, endometrial carcinoma can occur in younger women. The presence of atypical endometrial cells can be helpful for detecting such cases, but requires further diagnostic assessments. However, it is important for clinicians to know that normal Pap smear results do not rule out this endometrial cancer.*

INTRODUCTION

Endometrial carcinoma is the most common malignant tumor of the female genital tract and usually affects postmenopausal women. Only approximately 14% of endometrial carcinoma cases arise in women under 50-years-old, among which approximately 5% are in women under the age of 40. Well-recognized risk factors for developing endometrial cancer are excess estrogen, obesity, polycystic ovarian syndrome, estrogen-producing tumors, and exogenous exposure to unopposed estrogen therapy and tamoxifen. The risk is also higher in hereditary syndromes, most notably Lynch syndrome. However, over 33% of endometrial carcinomas in young women cannot be attributed to these risk factors (1).

In contrast to cervical carcinoma, endometrial adenocarcinoma has no cost-effective screening test, despite some evidence for cervical cytology being of some use in detecting endometrial diseases (2). The Bethesda System (2014) recommends reporting cytologically normal endometrial cells in women 45-years-old and older and atypical endometrial cells at any age. The reported rate of atypical glandular cells is estimated to be 0.1%–0.6%, whereas the prevalence of atypical endometrial cells in glandular epithelial abnormalities ranges from 7% to 60% (3, 4). Although glandular cells are often seen on Pap smears and glandular cell abnormalities are rarely reported, clinically significant lesions have been reported to be detected on Pap smears in 18% to 83% of patients with glandular cell abnormalities (5). Among the glandular abnormalities, atypical endometrial cells are an even rarer finding; however, they are significantly associated with endometrial pathology.

CASE REPORT

A 30-year-old nullipara visited a gynecologist to undergo her regular cervical cancer screening (Pap test). She entered a cervical cancer screening program at the age of 22, and all her previous smears were normal. Menarche occurred at 13 years. She complained of an irregular menstrual cycle with menstrual periods every 2–3 months for several years. Gastric bypass surgery had been performed because of extreme obesity (body mass index: 45 kg/m2) one year prior. She did not use any oral contraceptives. The Pap smear showed numerous atypical endometrial cells that predominantly occurred in clusters (Fig. 1, Fig. 2).

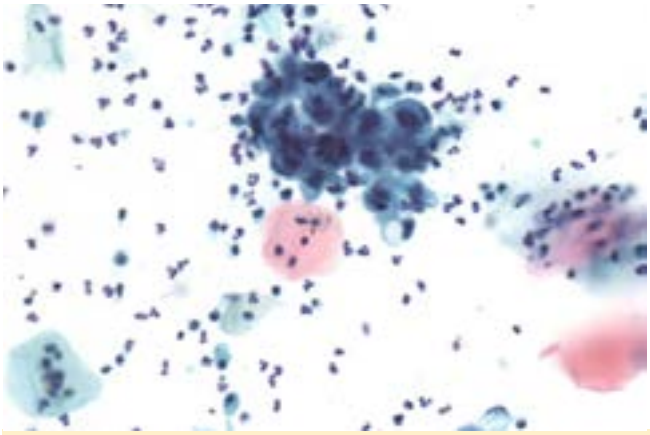

Figure 1. *Atypical endometrial cells, Papanicolaou, x400*

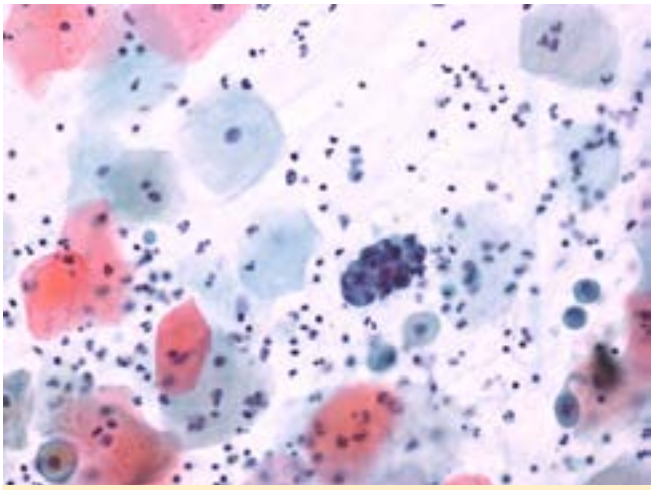

Figure 2. *Atypical endometrial cells, Papanicolaou, x400*

There were also some dissociated cells with marked anisocytosis (Fig. 3, Fig. 4). Ultrasound examination was performed because of her irregular menstrual periods and revealed polycystic ovarian disease. Her endometrium was thickened to 25 mm, and colposcopy was normal. Therapy with gestagens was prescribed, but she arbitrarily interrupted treatment shortly after it was initiated. Fractional curettage was performed, and endometrioid adenocarcinoma was diagnosed from the tissue samples. Surgical treatment was subsequently performed, including hysterectomy with bilateral salpingo-oophorectomy and pelvic lymphadenectomy. The final pathological exam showed well differentiated adenocarcinoma of endometrioid type with 2 mm of myometrial invasion (Fig. 5).

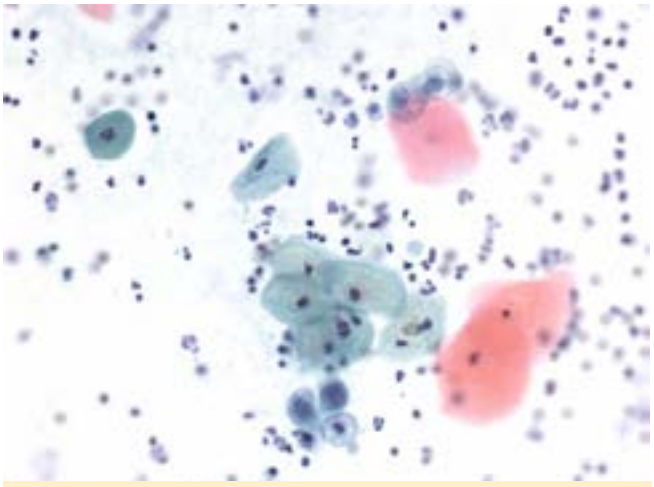

Figure 3. *Atypical endometrial cells, Papanicolaou, x400*

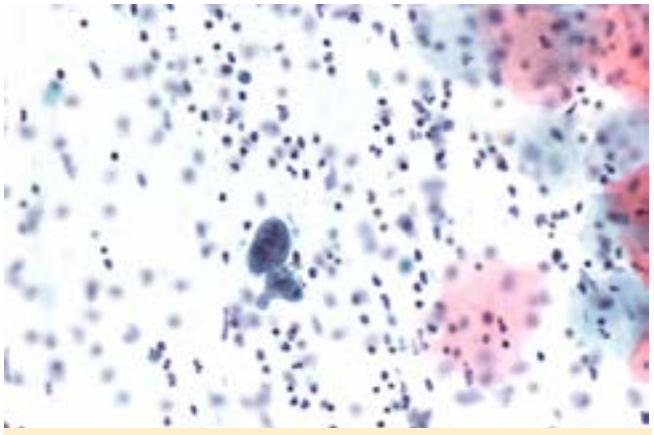

Figure 4. *Atypical endometrial cells, Papanicolaou, x400*

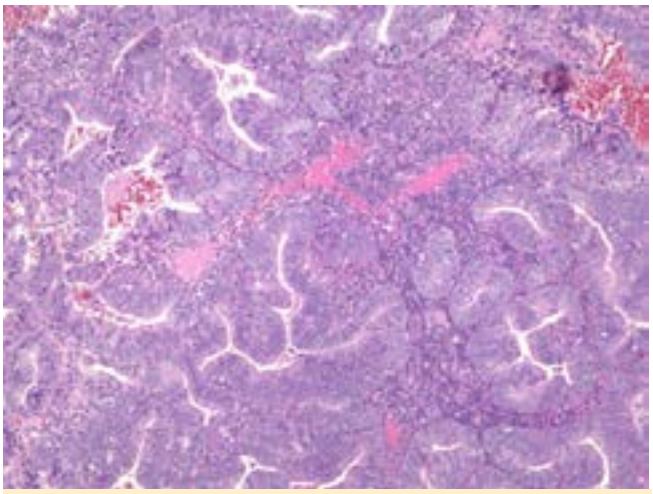

Figure 5. *Well differentiated adenocarcinoma of endometrioid type, HE x 400.*

DISCUSSION

Endometrial carcinoma is primarily a disease of older women, with postmenopausal bleeding as the leading symptom. It rarely occurs in women under 40 years of age, and is exceptional in patients 30 and younger (6, 7). Premenopausal women usually present with intermenstrual bleeding, bloody vaginal discharge, or heavy periods; however, sometimes they can be asymptomatic for a long time. There are no screening tests or exams for early-stage endometrial cancer in asymptomatic women who are at average risk of endometrial cancer. Early detection of endometrial cancer is possible by transvaginal ultrasound and endometrial biopsy (8, 9). An endometrial thickness

of less than 5 mm in postmenopausal women is associated with a <1% probability of endometrial cancer (10). However, no exclusion threshold in ultrasound-measured thickness of the endometrium has been established in premenopausal women (11). Recently, an endometrial cancer risk prediction model that could help identify at-risk women and provide them with targeted primary prevention measures such as diet, exercise, and the levonorgestrel-releasing intrauterine system (Mirena) was described (12). Our patient was overweight, had polycystic ovarian syndrome and irregular menstrual cycles, but did not visit her gynecologist because of these problems. Thus, her cancer would probably have been detected much later if she had not been invited for this cervical cancer screening program.

Pap tests are still the most successful and cost-effective screening tool with high sensitivity for detecting cervical squamous cell carcinoma and its precursors. However, it has a lower sensitivity for detecting glandular dysplasia and malignancy due to several factors, including the difficulty distinguishing high-grade squamous and glandular cells, less frequent exfoliation of malignant cells from the endometrium, and inadequate sampling due to inaccessibility of uterine lesions. Therefore, the sensitivity and positive predictive values of Pap tests are better for endocervical than endometrial glandular lesions. Importantly, clinicians need to be aware that a normal Pap smear does not rule out serious endometrial disease. Additionally, even normal endometrial cells can be associated with endometrial pathology in postmenopausal women (13, 14). Nevertheless, finding atypical endometrial cells in cervical cytology samples is a significant indicator for serious endometrial pathology in all patients, regardless of their menopausal status (15, 16).

CONCLUSIONS

Although rare, endometrial carcinoma can occur in young women, meaning it must be considered, especially when there are risk factors or other indicators. Postmenopausal patients with normal endometrial cells in cervical smears and all women with atypical endometrial cells regardless of age should be followed closely with routine endometrial sampling.

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