Shimane J. Med. Sci., Vol.14 pp.27-28, 1995/96

A CASE OF ENDOMETRIAL STROMAL NODULE

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Key words : Endometrial stromal nodule/LGSS/Leiomyoma

(Accepted December 15, 1995)

A case of 45-year-old Japanese woman with a presurgical diagnosis of uterine leiomyoma underwent a total abdominal hysterectomy and salpingo-oophorectomy. Pathologic examination revealed an endometrial stromal nodule. Although there is no reliable preoperative diagnostic procedure for identifying this entity, it should be included in the differential diagnosis of leiomyoma-like uterine lesions.

Tumors of the endometrial stroma include three types that have differing outcomes: stromal nodule, a benign tumor; low-grade endometrial stromal sarcoma (LGSS), a malignant tumor of generally indolent behavior; and high-grade endometrial stromal sarcoma, a fully malignant tumor with a generally unfavorable prognosis (1,2). Endometrial stromal nodule is a rare benign neoplasm of the uterine body. They have been coincidently noticed at operations for leiomyoma (3). Endometrial stromal nodule is a disease to be carefully differentiated from other stromal sarcomas as well (4).

We describe a patient with a stromal nodule that was encountered at an operation for a suspected uterine leiomyoma.

CASE REPORT

A 45-year-old Japanese woman, 2 gravida, 2 para, presented with menorrhagia, dizziness, fatigue, dull-pain in the lower abdomen and intolerance to exercise present for the past several years. Her medical history was otherwise unremarkable. Pelvic examination revealed normal genitalia, vagina and cervix. The uterus was of fist in size. Neither adnexa was enlarged. Papanicolaou smear and endometrial scraping smear were negative for tumor cells. Except for iron deficiency anemia (hemoglobin 5.6 g/dl, serum Fe 20 mg/dl, TIBC 539 mg/dl), laboratory investigations including serum CA125 were within normal limits. We suspected that the patient's complaints were attributed to anemia associated with a leiomyoma

After being treated for anemia, the patient underwent a total abdominal hysterectomy and bilateral salpingo-oophorectomy. Her perioperative period had been unremarkable.

Hysterectomy specimen

Gross inspection of the lesions revealed a well-circumscribed, gray to yellow tumor, measuring 5.7 x 6.6 x 7.8 cm within the myometrial layer that resembled a leiomyoma. Microscopically, however, it consisted of uniform cells that closely resembled the stromal cells of the normal proliferative phase endometrium (Fig. 1). The tumor exhibited an expansile, noninfiltrative margin that compressed the adjacent endometrium and myometrium. It consisted of small cells with spindle or oval nucleoli, with few mitotic figures. The tumor lacked necrotic calcifications and hemorrhages. Occasional epithelioid differentiation, specified by sex cord pattern (Fig. 2), and smooth muscle differentiation were also observed. The diagnosis of an endometrial stromal nodule was ultimately made in the light of these pathologic findings.

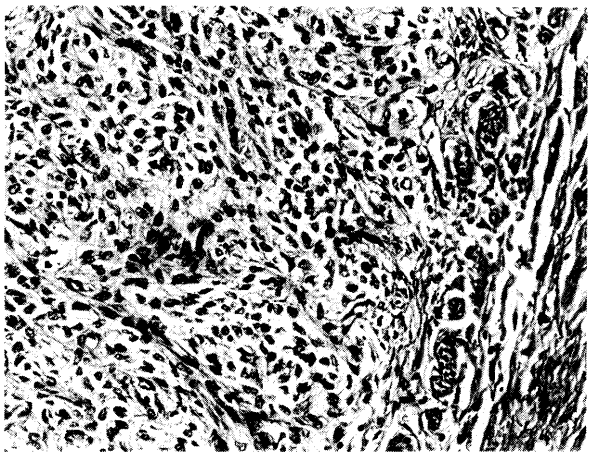

Fig. 1. The expansile margin of an endometrial stromal nodule. H & E. x 240.

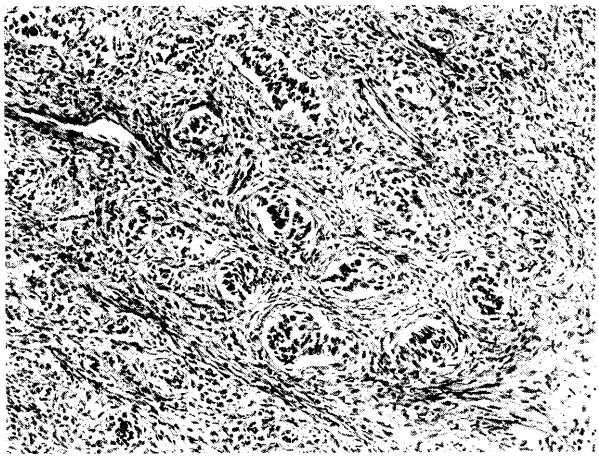

Fig. 2. The epithelioid differentiation, specified by sex cord pattern. H & E. x 120.

DISCUSSION

Benign endometrial stromal nodule is a rare mesenchymal tumor that accounts for about one-fourth of the endometrial stromal tumors (1-3).

Most of the patients suffered complain of abnormal vaginal bleeding, just as do patients with leiomyomas (1-4). Our patient similarly presented with abnormal bleeding and menorrhagia severe enough to produce anemia.

The differential diagnosis of an endometrial stromal nodule, especially of LGSS, is highly important, because of the difference in their clinical behavior. A stromal nodule is usually benign, whereas LGSS is classified in malignant entity, occasionally presents with invasion, metastasis beyond the uterus and/or with recurrence following the initial treatment (1, 2). Differential diagnosis depends on microscopic findings (1, 3). The cells within the stromal nodule being small and uniform closely resemble the stromal cells of the normal proliferative endometrium (1). There is minimal cytologic atypia, and mitotic activity, which may not be a sufficient criterion for the adverse prognosis, is usually low (1). While LGSS resembles the stromal nodule in its cytology and architecture, the former shows an infiltrating border between the tumor and surrounding myometrium (1,3,5). Since the certain parameters for predicting tumor behavior such as cytologic features and mitotic count are based on a subjective evaluation, so that quantitative measurements such as DNA flow cytometric, ultrastructural and immunohistochemical studies would be useful objective adjuncts for diagnosing endometrial stromal tumors (6-8).

Endometrial tumors are commonly coexistent with leiomyomata and/or adenomyosis (9), so we should distinguish these entities with caution.

If the diagnosis is a stromal nodule, hysterectomy or local excision only is recommended (1, 2). None of the patients in the three largest series reported to develop a recurrence, regardless of the extent of surgery (3). Our patient showed a well-circumscribed tumor with few mitotic activities, leading to the diagnosis of a stromal nodule. Thus the surgical treatment used in this case was suitable for this tumor.

We present a patient with an endometrial stromal nodule. In making diagnosis, we carefully differentiated it from a leiomyoma or low grade stromal sarcoma.

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