

## Correspondence Correspondance

### Extrapelvic endometriosis associated with occult groin hernias

**P**elvic endometriosis is common in menstruating women and may cause a wide spectrum of gynecologic complaints, including dysmenorrhea, menstrual irregularity, dyspareunia and infertility. Although all endometrial foci in extrapelvic sites show hormonal dependence they may cause unusual symptoms. We report 2 cases of groin endometriosis found in connection with occult hernias to underline the importance of including this unusual condition in the differential diagnosis of inguinal masses.

The first patient, a 35-year-old woman, was referred for removal of a lump located in the right labium majus, presumed to be an enlarged lymph node on the basis of ultrasonographic findings. She had discovered the mass several months after a cesarean section. The mass was characterized by local pain associated with the menstrual cycle. On examination a firm mass, 2 to 3 cm in dimension without fluctuation and covered by normal skin and pubic hair, was felt within the mid-portion of the right labium majus clearly not connected to the suprapubic scar from the cesarean section. The lump was nonreducible and did not modify with straining, coughing or changes in the patient's position. Pressure elicited mild pain. The presumed diagnosis was isolated extrapelvic endometriosis. Since there were periodic changes in the size of the mass according to the menstrual cycle, the woman was scheduled for surgery. At operation, the mass appeared as a bluish-red lump embedded in stiff scar tissue and was connected with a small hernial sac protruding through the lacunar (Gimbernat's) ligament. Histologic examination confirmed the diagnosis of endometriosis. The patient recovered completely and was free of

symptoms at 32-month follow-up.

The second patient, a 30-year-old woman, was referred for evaluation of a painful mass in the right groin. Investigations, including ultrasonography and magnetic resonance imaging, were not diagnostic. Pain, more severe during her menses, never subsided completely and had worsened during the 4 months before presentation. Examination confirmed a hard, nonfluctuant tender mass, 2 cm in diameter, located just above the inguinal ligament. Straining, coughing and changes in the patient's position neither exacerbated the pain nor made the lump more prominent. The mass was not reducible. At operation, the lump, surrounded by stiff scar tissue, was found to be connected to an inguinal hernial sac. Pathological examination of the excised specimen confirmed the diagnosis of endometriosis. The patient recovered completely and was well 14 months postoperatively.

Inguinal endometriosis is rare and may be difficult to recognize. Often it is confused with other more common disorders of the groin, such as lymphadenopathy, hernia, granuloma, neuroma, abscess, lipoma, hematoma, soft-tissue tumour, metastatic cancer and subcutaneous cyst. The majority of cases are believed to be caused by progression of pelvic endometriosis down the round ligament into the inguinal canal.<sup>1</sup>

Inguinal endometriosis has been described after gynecologic surgery, and only a minority of cases have been associated with a hernial sac.<sup>1</sup> In both our cases the disorder occurred on the right side. Although the reasons for right-sided predominance have not been identified, over 90% of inguinal endometriosis occurs on the right.<sup>2</sup> To the best of our knowledge, the association between vulvar (labium majus) endometriosis and lacunar ligament hernia, described here, has never been reported.

Both our patients denied symp-

toms of pelvic endometriosis. Indeed, inguinal endometriosis is not necessarily associated with a pelvic location. Moreover, when it is clinically silent, pelvic endometriosis may not require further investigation or treatment. Accordingly, pelvic laparoscopy was not done in our patients.

The cases of vulvar and inguinal endometriosis we have described may be of interest to the general surgeon who commonly manages patients with groin masses but does not deal often with endometriosis. Hernias associated with endometriosis may not be clinically detectable. Even though no proven explanation can be offered, the scarring reaction that surrounds endometrial foci may reduce tissue elasticity, thus hindering hernia detection on physical examination.

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### References

1. Brzezinski A, Durst AL. Endometriosis presenting as an inguinal hernia. *Am J Obstet Gynecol* 1983;146:982-3.
2. Candiani GB, Vercellini P, Fedele L, Nicoletta V, Carinelli S, Scagkione V. Inguinal endometriosis: pathogenetic and clinical implications. *Obstet Gynecol* 1991; 78:191-4.

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### Coexisting mammary tuberculosis and malignant disease

**T**he coexistence of mammary tuberculosis and breast cancer is

rare, but a number of cases have been reported in the literature.<sup>1,2</sup> We report here a further case.

A 45-year-old perimenopausal woman was referred to our institution after excisional biopsy of a long-standing mass in the left breast that had revealed infiltrating duct carcinoma. Three months later there was a recurrence at the same site.

There was no history of tuberculosis or other illness. General physical examination revealed nothing abnormal. Examination of the breasts revealed a mass in the left breast, measuring 8 × 6 cm around a horizontal 5-cm scar in the central quadrant. The nipple-areola complex was absent. The mass was nontender, mobile, hard and fixed to the overlying skin but not to the chest wall. Ipsilateral fixed lymphadenopathy was present.

Mammography suggested that the mass was malignant. Fine-needle aspiration (FNA) of the mass revealed numerous epitheloid cell granulomas and Langhans giant cells in a background of inflammatory cells, capillary fragments and necrosis. In addition, there were few atypical duct cells. Staining for acid-fast bacilli gave strongly positive results. FNA of the axillary mass revealed fat mixed with ductal epithelial cells, showing minimal pleomorphism. An axillary lymph-node biopsy showed metastatic adenocarcinoma. A review of the histologic findings obtained from the previous surgery confirmed infiltrating duct carcinoma, grade I. The Mantoux test gave positive results and the erythrocyte sedimentation rate was elevated. Work-up for metastatic disease gave negative results.

Combination chemotherapy was begun (5-fluorouracil, doxorubicin and cyclophosphamide) along with combination-drug treatment for tuberculosis (rifampin, isoniazid, pyrazinamide and ethambutol). The masses had disappeared by the third cycle of chemotherapy. Total mastec-

tomy with axillary clearance was carried out after 4 cycles of chemotherapy, as is our protocol for locally advanced breast cancer. Histologic examination of the excised tissue showed areas of necrosis surrounded by palisading histiocytes, epithelial cells, fibroblasts and Langhans giant cells surrounded by lymphocytes. Areas of adenosis and epithelial hyperplasia and hemosiderin deposits were also seen. All lymph nodes showed reactive hyperplasia. There was no evidence of malignancy in the excised specimen, and staining for acid-fast bacilli gave negative results. Postoperatively the patient continued with the antituberculosis treatment and combination chemotherapy.

### Comment

Sir Astley Cooper first described mammary tuberculosis in 1829,<sup>3</sup> and fewer than 700 cases have been described to date.<sup>4</sup> In 1925, Nagaskima<sup>5</sup> showed that the breast was the only organ to be spared in 34 patients who had disseminated disease.

Mammary tuberculosis usually affects young women (20 to 40 years of age), especially lactating multiparous women. It is rare in men and in elderly women and prepubertal girls. Bilaterality is rare.<sup>3,4</sup> The primary form is caused by blood-borne organisms, and no other focus should be present. Secondary invasion of the breast can occur via blood, lymphatics or by direct extension. Mammographic findings may suggest malignant disease in many cases.<sup>3,4</sup>

Our patient was treated with a combination of antitubercular drugs and combination chemotherapy, which brought about a complete pathological response. Neoadjuvant chemotherapy is standard care for locally advanced breast cancer, and our experience shows that it can also be used successfully with anti-

tuberculosis therapy to treat patients such as ours.

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### References

1. Grausman RI, Goldman ML. Tuberculosis of the breast: report of nine cases including two cases of co-existing carcinoma and tuberculosis. *Am J Surg* 1945;67:48-56.
2. Kaplan MH, Armstrong D, Rosen P. Tuberculosis complicating neoplastic disease. A review of 201 cases. *Cancer* 1974;33:850-8.
3. Wilson TS, MacGregor JW. The diagnosis and treatment of tuberculosis of the breast. *CMAJ* 1963;89:1118-24.
4. Hale JA, Peters GN, Check JH. Tuberculosis of the breast: rare but still extant. Review of the literature and report of an additional case. *Am J Surg* 1985;150:620-4.
5. Nagaskima Y. Role of tuberculosis in female breast in presence of tuberculosis of internal organs and especially in miliary tuberculosis. *Virchows Arch [Cell Pathol]* 1925;254:184.

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### Education versus service

After reading Waddell's Editors' View in the October 2000 issue of the *Canadian Journal of Surgery* (page 326), we are still searching for the "controversial" theme, which was extracted from it and translated into a front-page story in *The Ottawa Citizen* on Tuesday, Nov. 21, 2000, by reporter Ian MacLeod. The front page screamed the headline "Ethics lessons rob surgeons of scalpel skills."