RUPTURED TUBO-OVARIAN ABSCESS IN A POSTMENOPAUSAL WOMAN PRESENTING WITH SEPTIC SHOCK: A CASE REPORT AND LITERATURE REVIEW

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SUMMARY

Objective: To report a case of a ruptured tubo-ovarian abscess which induced septic shock in a postmenopausal woman.

Case Report: A 53-year-old postmenopausal woman was transferred to our emergency department for drowsiness, hypotension, and lower abdominal discomfort. Transabdominal sonography and computed tomography showed a large pelvic tumor over the left adnexa with some ascites. The uterus and other adnexa were unremarkable. Laboratory data, including blood count and electrolytes, showed leukocytosis and azotemia. Under suspicion of a ruptured adnexal tumor, laparotomy was performed and showed a large ruptured tubo-ovarian tumor arising from the left adnexa with intra-abdominal pus formation. Subtotal hysterectomy and bilateral salpingo-oophorectomy led to massive bleeding during manipulation of the left adnexa because of the necrotic change in the left infundibulopelvic vessels. Deep vein thrombosis and wound disruption occurred after the operation, but, fortunately, she recovered 1 month later.

Conclusion: Tubo-ovarian abscesses in postmenopausal women are uncommon but should be kept in mind with a pelvic tumor accompanied by septic shock, as this may cause a terrible outcome and other sequelae.


Key Words: septic shock, tubo-ovarian abscess

Introduction

Tubo-ovarian abscesses are not uncommon problems in reproductive-age women. This is partly due to the lack of understanding of the etiology and natural history of the disease. This condition is best managed with a multidisciplinary approach. In recent years, the emphasis in clinical management has tended towards psychosocial or psychosexual involvement after organic disease has been excluded [1].

Case Report

A thin 53-year-old postmenopausal woman, with a body mass index of 20, was transferred to our emergency department for drowsiness, hypotension, and lower abdominal discomfort. Transabdominal sonography and computed tomography showed a large pelvic tumor with some ascites, she was transferred to our hospital for further evaluation.

The patient had generalized weakness, hypotension (80/40 mmHg), and sinus tachycardia (120 bpm) when she arrived at our emergency department. Abnormal laboratory data were: granulocytosis, 81% (normal, 45–70%); blood urea nitrogen, 38 mg/dL (normal, 6–22 mg/dL); creatinine, 3 mg/dL (normal, 0.6–1.3 mg/
Pelvic inflammatory disease is common in women of reproductive age, but it is rare in the postmenopausal period except in women using an IUD. A review of the literature concerning pelvic and abdominal abscesses in the postmenopausal period revealed that postmenopausal uterine bleeding, recent endometrial instrumentation, and a palpable pelvic mass were the most common findings [1].

On admission, however, presenting signs and symptoms are generally not helpful in making a correct diagnosis. Fever and the presence of a pelvic mass and an elevated white blood cell count, without evidence of peritonitis, are frequent findings on admission. Clinical and sonographic findings are usually sufficient to recognize pelvic inflammatory disease in premenopausal women, but in the elderly, the disease may easily be overlooked, largely due to a lack of suspicion [2]. Computed tomography can be helpful when the clinical and sonographic findings are complex or equivocal. However, when the clinical suspicion is low, results can be very difficult to interpret, especially when complicated with peritonitis [3]. Protopapas et al reported that, in premenopausal and postmenopausal women diagnosed with a tubo-ovarian abscess, abdominal pain occurred in 82% and 18% and pyrexia of more than 38°C in 74% and 41%, respectively. Irregular vaginal bleeding and gross ascites were significantly more frequent in postmenopausal women. Conservative treatment of a tubo-ovarian abscess is not recommended during menopause [4].

*Escherichia coli*, *Bacteroides* spp., and *Klebsiella pneumoniae* are the most frequently encountered pathogens in postmenopausal women with tubo-ovarian abscesses. *Neisseria gonorrhoeae* and *Chlamydia trachomatis*, which are frequently isolated from cervical cultures, are uncommonly isolated from tubo-ovarian abscesses. About 40% of tubo-ovarian abscesses can be treated with antibiotics alone, 18.8% with abdominal surgery, and 32% with surgery and antimicrobial therapy [5].

The gold standard for conservative management of intraperitoneal abscesses is combined antibiotic treatment. A review showed that, in 203 patients treated for pelvic inflammatory disease, the combined regimen of ampicillin, clindamycin, and gentamicin seemed more efficient than cefotetan plus doxycycline or clindamycin plus gentamicin in the treatment of tubo-ovarian abscesses. Cefotetan plus oral doxycycline is the most cost-effective regimen for treating uncomplicated pelvic inflammatory disease, whereas triple antibiotic therapy is the treatment of choice in women with tubo-ovarian abscesses [6].

A common intraoperative complication of surgery is inadvertent bowel injury. Postoperative complications include fascial dehiscence, enterocutaneous fistulae, deep venous thrombosis, and a need for prolonged
ventilatory support. A high index of suspicion is required for early recognition of a postmenopausal tubo-ovarian abscess. Prompt surgical exploration should be done to avoid occult rupture or sepsis [7]. Hoffman et al showed that about 66% of postmenopausal women with tubo-ovarian abscesses may have concomitant pelvic pathology such as genital tract malignancies [8]. An attempt at early recognition and surgical management of tubo-ovarian abscesses is important in postmenopausal women. There is little to be gained by delaying surgical treatment, and the patient is at significant risk of deterioration. In addition, surgical exploration appears to be vital for recognizing and treating a concomitant pelvic malignancy or other pathologic conditions that may be contributing to the abscess [8].

The case we presented here exhibited septic shock and dehydration. Emergency surgical intervention was necessary, and empirical triple antibiotic therapy after the operation was suggested before drug sensitivity information from culture. In addition, the use of intrabdominal and subcutaneous drains may decrease morbidity when operating on these kinds of patients, especially the obese [9,10].

References