

PELVIC ACTINOMYCOSIS AFFECTING GENITAL AND DIGESTIVE TRACTS: A CASE REPORT

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INTRODUCTION

Pelvic actinomycosis is an uncommon invasive disease caused by a bacteria of the *Actinomyces* spp. The diagnosis constitutes a clinical challenge and is usually reached in the postoperative period. We illustrate a case of pelvic actinomycosis with extensive involvement of multiple pelvic organs, requiring a radical surgery.

METHODS

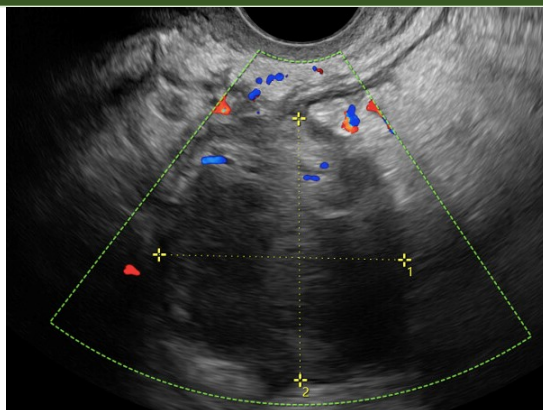
This is a case report of a 48-year-old woman who was attended in the emergency room complaining of an intermittent abdominal pain, loss of weight, anorexia and asthenia over the preceding months accompanied with fever in the recent days. No relevant medical history. She was IUD user for more than 10 years. Physical examination showed an increased tenderness at the right iliac fossa.

RESULTS

- Laboratory findings: C-reactive protein level of 10 mg/dl, hemoglobin of 7.5 mg/dl, creatinine of 1.41 mg/dl and altered prothrombine time. Negative tumor markers
- US-guided biopsy of the lesion: *Escherichia Coli* growth and pathologic study negative for malignancy
- The IUD was removed (with negative culture)

- Piperaciline - Tazobactam was started but 48 hours later patient persisted with fever and pain and a surgery was decided
- Surgical findings: a solid magma in the right side of the pelvis adherent to the major epiplon, right adnexa, bladder, sigmoid colon and ileum. No ascites neither signs of carcinomatosis
- Surgery: Total hysterectomy with right salpingo-oophorectomy with a high anterior resection of rectosigmoid colon with terminal colostomy
- The postoperative period was uncomplicated. The patient received intravenous piperaciline-tazobactam during 1 month and a Hartmann reconstruction was finally performed

Microbiological samples resulted negative. The histopathological examination showed granulomatous inflammation with fibrosis, abscess and focally containing clumps of basophilic filamentous bacteria that were surrounded by acute inflammation positive for Gram and periodic acid-Schiff (PAS), consistent with **actinomycosis**.



Pelvic US: right ovarian with a heterogeneous cystic formation of 76x50 mm, with peripheric Doppler vascularization, suggestive of abscess.



Abdomino-pelvic CT: infiltrative magma with cystic lesions of 8x5 cm in the right adnexal fossa affecting the sigmoid colon, ileum and the bladder, with ureteral infiltration; suggesting a chronic inflammatory process or a tumoral proliferation.

CONCLUSIONS

- The use of IUD for prolonged periods is known to be the major risk factor for Actinomycosis
- Actinomyces are slow-growing and tissue-invading bacteria; therefore can imitate a carcinogenic process
- The diagnostic images cannot distinguish between actinomycosis and malignant lesions. In most cases, the bacteriological cultures return negative and the diagnosis of actinomycosis is established on the surgical specimen after the surgery
- Treatment of actinomycosis can be completed using antibiotic therapies as simple as penicillins for 6–12 months. However, surgery, as seen in our case, can accelerate disease resolution when compared with antibiotic therapy and helping to reduce the time of the antibiotic therapy