LETTER

Atypical manifestation of giant cell arteritis: involvement of uterus

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Dear Editor,

Giant cell arteritis (GCA) is a granulomatous large-vessel vasculitis classically affecting the aorta and its major branches, especially extracranial branches of the carotid artery[1]. GCA may involve any organ, either as a single finding or as part of a systematic process[2]. The involvement of the female genital tract (FGT) has been reported in thirty-five cases of GCA in the literature, including our case[3].

A 65-year-old Caucasian woman with no comorbidities underwent a vaginal hysterectomy and anterior colporrhaphy due to symptomatic uterine prolapse. Postoperative recovery was uneventful, the patient progressively improved, and she was discharged from the department with normal laboratory examinations on the 4th postoperative day.

She attended the department urgently on the 20th postoperative day complaining of fever, dysuria, and declining general health. On admission, no pathological signs were elicited by physical examination. Laboratory examinations showed normal white blood cell count and mild anemia (hematocrit: 34.4 %, hemoglobin: 10.9 g/dL). Pelvic ultrasound examination did not detect any pathology related to fever. Urinalysis indicated multiple polymorphonuclear leucocytes and urine cultivation showed Escherichia coli $<10^4$ CFU/mL. She was admitted to the hospital and intravenous antibiotic treatment was initiated (intravenous ciprofloxacin 200 mg bds).

However, her medical state did not show any improvement, and fever did not subside. As regards inflammatory markers, erythrocyte sedimentation rate was increased (99 mm/h), C-reactive protein was 46 mg/L, and procalcitonin was within normal range. A complete immunologic panel was sent, and all results did not add value to the clinical assessment.

Histopathology of the specimen showed widespread GCA affecting multiple small- to medium-sized arteries of the uterus. A dense inflammatory infiltrate seen in the majority of the affected arteries, mainly consisted of lymphocytes, histiocytes, and plasma cells. In a localized area of the media, granulomatous inflammation was focal, and some arterial media were replaced circumferentially by granulomatous tissue. Multi-nucleated giant cells were also present.

The diagnosis of giant cell arteritis of the FGT was made in the uterine specimen, and she was referred to a rheumatologist. The patient underwent temporal arterial biopsy, and hence the diagnosis of GCA was established, suggesting generalized disease. An expert suggested the initiation of systemic corticosteroid therapy (oral prednisone 60 mg per day), and she responded adequately to treatment.

Cases with GCA of the FGT are characterized by the involvement of small- and medium-sized arteries[3-4]. The real clinical significance of this microscopic finding remains obscure. The unexpected finding of vasculitis in the genital tract specimen obligates a thorough evaluation of the patient to discover similar disease in distant organs[4]. It is well documented that GCA may be activated by environmental factors, autoantigens, or infections[1]; although, our case indicates that surgical stress may have triggered the flare of GCA. Prompt and appropriate treatment should be initiated if the findings suggest generalized disease[1-2].

Keywords: Giant cell arteritis, gynecologic vasculitis, female genital tract

Conflict of interest

The authors declare no conflict of interest.

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