Clinical Image

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Giant cell arteritis of the uterus

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A 76-year-old woman was admitted to our hospital via the emergency room in June 2008 for persistent fever (temperature on admission, 102 °F; maximum temperature, 102.8 °F). She was ill-appearing without concerns of clinical instability. Her physical examination was normal except for abdominal tenderness with no rebound or guarding, and infection work-up was unrevealing. Her erythrocyte sedimentation rate was 110 mm/h and her c-reactive protein level was 302 mg/L. A chest radiograph was negative, but computed tomography of the abdomen and pelvis showed a 3.8 cm collection of complex fluid within the uterine endometrium (Image A). She remained febrile despite treatment with vancomycin, imipenem, and fluconazole. Examination under anesthesia with dilation and curettage yielded negative pathology and cultures including bacterial, fungal, and acid-fast bacilli. Given the patient's lack of improvement with medical therapy and a presumed uterine source of infection, the decision was made in collaboration with the patient to pursue surgical management with total abdominal hysterectomy and bilateral salpingo-oophorectomy. Hematoxylin and eosin stain of the uterus showed obliterated blood vessels with giant cells, and elastic tissue stain showed loss of interna elastic lamina (Image B) and inflammation of intima (Image B) consistent with giant cell arteritis (GCA). Clinical

improvement was noted postoperatively, with complete resolution of the patient's fever and associated symptoms following a course of prednisone. She remained

Image A: Computed tomography of the abdomen and pelvis in this 76-year-old woman who presented to the emergency room with persistent fever showed a 3.8 cm collection of complex fluid or soft tissue (arrows) within the uterine endometrium.

Image B: Elastic tissue stain of the uterus of this 76-year-old woman showed loss of interna elastic lamina (arrows) and inflammation of intima (star).

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afebrile postoperatively during multiple gynecologic oncology follow-up appointments; she was last seen in our hospital in October 2012.

GCA has been associated with extracranial involvement in up to 15% of patients, usually affecting large- and medium-sized vessels [1, 2]. Involvement of the uterus is uncommon, although it has been speculated that many cases are unrecognized [3]. Histopathologic involvement has been demonstrated in most genital organs [2]. GCA of the male genitourinary tract has also been reported [3]. In most published cases, diagnosis of GCA involving the uterus or other reproductive organs was made incidentally [2, 3]. Our case highlights the need to consider surgical management as a means of source control in the setting of clinical infection uncontrolled by antimicrobial therapy; it also highlights need for consideration of the pelvic viscera as the source of infection rather than an incidental finding.

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References

1. Lhote F, Mainguene C, Griselle-Wiseler V, Fior R, Feintuch MJ, Royer I, et al. Giant cell arteritis of the female genital tract with temporal arteritis. *Ann Rheum Dis* 1992;51:900–3.
2. Bajocchi G, Zamora G, Cavazza A, Bajocchi G, Pipitone N, Versari A, Boiardi L, et al. Giant-cell arteritis of the female genital tract associated with occult temporal arteritis and FDG-PET evidence of large-vessel vasculitis. *Clin Exp Rheumatol* 2007;25(1 Suppl 44): S36–39.
3. Butendieck RR Jr, Abril A, Cortese C. Unusual presentation of giant cell arteritis in 2 patients: uterine involvement. *J Rheumatol* 2018; 45:1201–2.