CMV Oophoritis in an AIDS Patient

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ABSTRACT

Background: Disseminated cytomegalovirus (CMV) infection is relatively uncommon, occurring primarily in immunocompromised hosts and neonates. Patients with acquired immunodeficiency syndrome (AIDS) are the most common hosts, with symptoms secondary to lung and eye involvement. There have been no reports of symptomatic CMV infection of the pelvis in women.

Case report: This case is the first described of acute symptomatic CMV infection of the genital tract in a woman with AIDS. Her presenting symptoms were the result of acute CMV oophoritis. In addition, CMV was found in the endometrium and endosalpinx (an infected structure heretofore unreported).

Conclusion: The increasing prevalence and incidence of AIDS in women should make us aware of the possibility of opportunistic, symptomatic CMV pelvic infection.
measures of clotting function were normal, and a vaginal hysterectomy was performed. The microscopic pathology of the uterine specimen demonstrated CMV endometritis as well as CMV inclusions in numerous small fibromyomata. The histology of the uterus identified CMV for the first time in this patient. Subsequently, she had CMV identified in her blood, sputum, and urine.

Ten days after her discharge, she was readmitted with severe pelvic and rectal pain. Examinations, barium enema, colonoscopy, and pelvic ultrasounds were not helpful in diagnosing her pain origin. She required high-dose narcotic analgesia. In less than a month, she was admitted to another hospital with an acute abdomen necessitating an ileocecal resection. A pathologic review of this specimen showed ischemic necrosis of the cecum with perforation. CMV was not identified in this specimen.

Her persistent pelvic pain prompted another admission in the same month. A colonoscopy with biopsies of the anastomotic site and the colon generally revealed CMV infection. The patient's pelvic and rectal pain continued, requiring parenteral morphine as well as repeated caudal blocks. She died 2 months later.

**Autopsy Findings**

The important gross findings included diffuse consolidation of both lungs. The gastrointestinal tract was unremarkable. No ulcerations were identified. The ovaries were adherent to the pelvic sidewalls.

Microscopically, both lungs showed extensive acute and chronic CMV pneumonitis. CMV colitis and proctitis were also identified, but no ulcerations were found. The endometrium from the hysterectomy done three months earlier demonstrated CMV inclusions in the columnar epithelium (Fig. 1.). Both ovaries showed extensive involvement with CMV (Fig. 2).

**DISCUSSION**

In immunocompromised AIDS patients, CMV is known to involve the lungs, adrenals, retina, brain, liver, esophagus, and colon. CMV pneumonitis alone has a mortality rate of nearly 90%. An immune complex nephropathy has also been reported in association with CMV. While CMV is known to infect the ovaries in patients immunocompromised by malignancies or chemotherapy, CMV involving the ovaries with HIV infection has not been noted heretofore. The patient described here had intractable pelvic and rectal pain, which can be explained, in part, by the extensive CMV oophoritis. The findings of CMV in the uterus and fallopian tube, while interesting, were not associated with the extensive inflammation seen in the ovaries.

With the increasing number of female AIDS patients, we may postulate that CMV oophoritis, as well as CMV infection of other areas of the genital tract, will be seen more often. However, in a 5-year period, a review of 12 autopsies in the Department of Pathology, University of Rochester, in female AIDS patients, 4 of whom had disseminated CMV, no such involvement of the ovaries or other genital tract structures was seen. In view of the difficulty in diagnosing this disorder, CMV oophoritis secondary to CMV infection should be included in the
CMV OOPHORITIS

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REFERENCES

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