CHEST

Selected Reports

Vaginal Involvement in a Patient With Sarcoidosis

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We report the case of a woman who presented with vaginal symptoms and was proven to have biopsy-confirmed sarcoidosis of the vaginal wall. To our knowledge, this is the first reported case of this entity. An additional unusual finding was that her symptoms of gynecologic sarcoidosis occurred at the time of initial presentation of her pulmonary sarcoidosis.

CHEST 2010; 137(2):455–456

Sarcoidosis is a multisystem granulomatous disease that rarely affects the female genital tract. The uterus is the portion that is most frequently involved. Additionally, cases have been reported in the ovaries, fallopian tubes, cervix, and placenta.[1] We present a patient with sarcoidosis involving the vaginal wall. To our knowledge, this is the first reported case of vaginal sarcoidosis.

Case Report

A nonproductive cough, wheezing on exertion, and night sweats developed in a 30-year-old African-American woman. In addition, she developed cervical, inguinal, and epitrochlear lymphadenopathy. She had no history of tuberculosis or tuberculosis exposure; a tuberculin skin test was performed and was negative. She had no history of cigarette smoking, alcohol abuse, or illicit drug use. She had no family history of sarcoidosis. The patient was referred to a general surgeon, who deferred performing a lymph node biopsy. Concurrently, the patient began to develop vaginal itching and irritation. She was treated with numerous courses of antibiotics by her gynecologist without relief of her symptoms. In light of continuing complaints, she underwent an extensive workup of tests for sexually transmitted diseases, all of which were negative.

Because the patient's vaginal complaints were recalcitrant to therapy, the patient underwent a vaginal wall biopsy. The biopsy specimen confirmed noncaseating granulomatous inflammation consistent with sarcoidosis and was negative for birefringent material, acid fast bacilli, and fungi (Fig 1). The patient was subsequently started on prednisone 40 mg daily for 2 weeks and then tapered to 30 mg daily. Corticosteroids improved her vaginal symptoms as well as her dyspnea and cough.

She was subsequently referred to our medical center. Her initial chest radiograph demonstrated bilateral hilar and mediastinal lymphadenopathy with diffuse multiple nodular opacities compatible with parenchymal sarcoidosis (Fig 2). Initial spirometry showed an FVC of 3.77 L (119% predicted), an FEV_1 of 3.18 L (121% predicted), and an FEV_1/FVC of 0.85. Her major clinical manifestation of sarcoidosis remained vaginal itching and irritation, and this was the reason that she required antisarcoidosis therapy. Using a vaginal corticosteroid cream coupled with chloroquine 500 mg daily, her daily prednisone dose was reduced to 10 mg. On daily prednisone doses of < 10 mg, her vaginal symptoms recurred. Her only other manifestation of sarcoidosis that required therapy was a transient facial skin rash that resolved after 3 months of transiently increasing her corticosteroid dosage to 20 mg of daily prednisone.

Discussion

To our knowledge, we report the first documented case of vaginal sarcoidosis. Sarcoidosis of the female genital tract is rare and most commonly involves the uterus. Before a

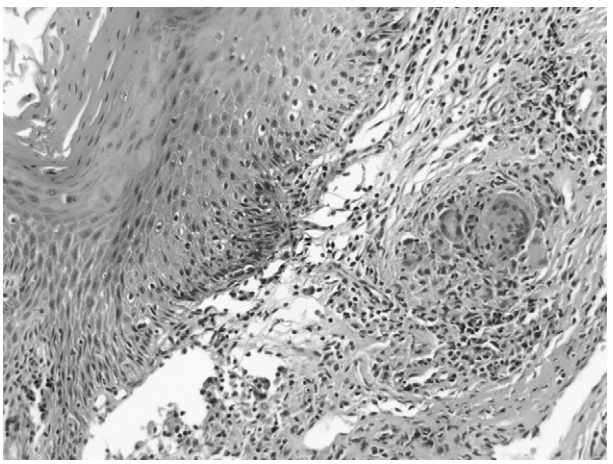

Figure 1. Noncaseating granuloma typical of sarcoidosis, with multinucleated giant cells (right) adjacent to stratified squamous epithelium of the vagina (left) (hematoxylin and eosin stain; magnification ×40).

Manuscript received January 14, 2009; revision accepted May 1, 2009.

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DOI: 10.1378/chest.09-0076

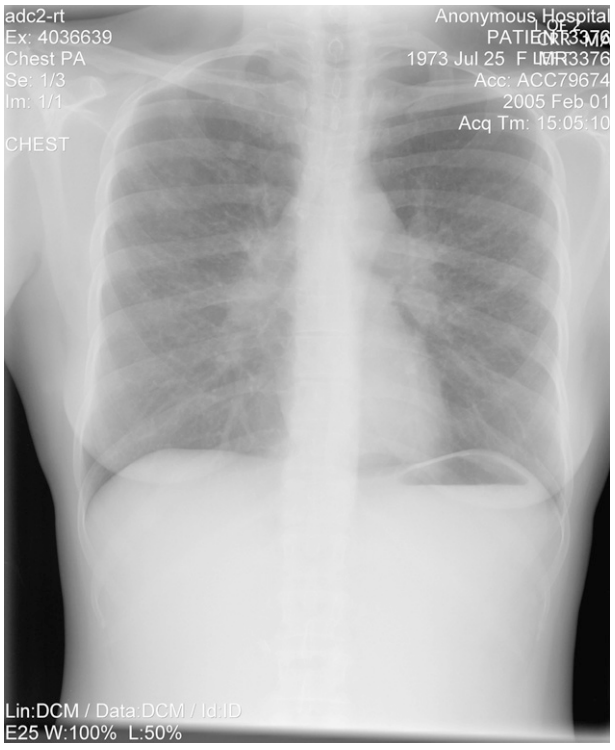

FIGURE 2. Initial posterior-anterior chest radiograph demonstrating bilateral hilar adenopathy and diffuse small nodular opacities.

diagnosis of vaginal sarcoidosis can be made, other known causes of granulomatous vaginal disease should be excluded, including tuberculosis,[1-3] cryptococcosis,[4] and lymphogranuloma inguinale.[5] Typically, these conditions can be excluded with appropriate stains and cultures for these organisms.

It is possible that our patient additionally had involvement of other portions of the female genital tract. However, our patient only complained of vaginal symptoms and not menorrhagia, menometrorrhagia, or amenorrhea. This suggests that her sarcoidosis was confined to or was most prominent in the vaginal area.

An additional interesting aspect of this case is that our patient initially was diagnosed with sarcoidosis by biopsy of the female genital tract. Typically, women in whom genital tract sarcoidosis is discovered have previously been diagnosed with sarcoidosis involvement of other organs.[6] Although our patient had pulmonary symptoms at the time of diagnosis, these symptoms were not prominent, and pulmonary sarcoidosis was suspected only after the diagnosis of vaginal sarcoidosis was made. Subsequently, cutaneous sarcoidosis was diagnosed as well.

Although we are unaware of previous reports of vaginal wall sarcoidosis, it is possible that other cases may have gone undetected because patients were asymptomatic or were treated for involvement of other organs before symptoms of vaginal sarcoidosis could manifest. In our patient, topical vaginal corticosteroid creams were useful as adjunctive therapy to lower her corticosteroid requirements. However, oral corticosteroids and chloroquine were also required to control her symptoms.

On the basis of this case report, vaginal sarcoidosis should be a consideration in a woman with granulomatous inflammation of the vaginal wall. Before such a diagnosis is made, diligence is required to exclude other potential causes of granulomatous inflammation.

ACKNOWLEDGMENTS

Financial/nonfinancial disclosures: The authors have reported to *CHEST* that no potential conflicts of interest exist with any companies/organizations whose products or services may be discussed in this article.

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Diffuse Alveolar Hemorrhage Induced by Everolimus

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Pulmonary toxicity is a known complication of the proliferation signal inhibitor (PSI) sirolimus and consists of diverse entities such as interstitial pneumonitis, lymphocytic alveolitis, bronchiolitis obliterans with organizing pneumonia, and diffuse alveolar hemorrhage. Several cases of interstitial pneumonitis have also been reported with the more recently developed PSI everolimus. In this report, a case of diffuse alveolar hemorrhage attributed to everolimus is described. The patient presented with respiratory symptoms of insidious onset, ultimately resulting in severe respiratory failure characterized by high lactate dehydrogenase levels, patchy ground-glass infiltrates, and bloody BAL fluid with predominance of iron-loaded macrophages and monocytes. Withdrawal of the offending drug and temporary association of high-dose steroids resulted in a rapid recovery. Given that prompt drug discontinuation is potentially life saving, PSI-induced pulmonary toxicity should be considered in the differential diagnosis of patients treated with PSIs and presenting with respiratory symptoms or pulmonary lesions.

CHEST 2010; 137(2):456–459

Abbreviations: PSI = proliferation signal inhibitor