https://doi.org/10.29289/259453942022V32S1039

463 - GRANULOMATOUS MASTITIS CAUSED BY HISTOPLASMA CAPSULATUM

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Histoplasma is a thermally dimorphic fungus with endemic and opportunistic behavior, which causes a systemic disease known as histoplasmosis. The habitat for this fungus is soil laden with bird and bat droppings, in caves and henhouses, and it persists in the environment long after the contamination. This fungus is widely disseminated in the American continent. In South American countries, the disease is mainly present in Venezuela, Colombia, Peru, Brazil, Argentina, and Uruguay. Man is contaminated by inhaling conidia present in nature, and most infections are mild and subclinical. After being inhaled, conidia undergo phagocytosis by macrophages and mononuclear cells, which are unable to destroy them. They multiply inside these cells, traveling through mediastinal and hilar lymph nodes and into the bloodstream, spleen, bone marrow, liver, skin, and subcutaneous tissue. The diagnosis is based on the detection of the fungus in secretions or tissues and in serology tests. Among these tests, enzyme-linked immunosorbent assays are more sensitive and specific than complement fixation. Tissue biopsies show epithelioid granulomas, with or without necrosis, and fungi within phagocytic cells. Gomori-Groccot staining is required for the visualization of the fungus. A 22-year-old female patient, an undergraduate psychology student, from the urban area of the inner state of Sergipe, no comorbidities, vegetarian, visited a mastologist due to the recent appearance of a nodule in the right breast associated with signs of inflammation and no fever. The clinical examination showed a 2 cm palpable, retroareolar thickening, and thickening of the areolar skin with discrete hyperemia, and no palpable axillary lymph nodes. The patient was initially treated with amoxicillin and clavulanic acid for 7 days. After treatment, there was regression of the inflammation signs upon physical examination; however, the thickening remained and the areolar skin was still thickened and hard. An ultrasound of the right breast showed a well-defined heterogeneous, superficial, and elongated retroareolar nodular image, measuring 3.4×1.2 cm. A breast ultrasound-guided fine-needle aspiration (FNA) was performed, and the cytology test suggested an inflammatory process. After 1 month, the patient returned with two areolar fistulas with yellowish discharge. A new cycle of antimicrobial therapy was started with clindamycin for 14 days. The secretion was decreased over the antibiotic period; however, 14 days after the treatment, the two areolar fistulas were still present with yellowish discharge. A third cycle of antibiotic therapy with metronidazole was administered with no improvement. An excisional biopsy was performed of the area around the fistula and the underlying breast tissue. Two specimens were examined — one skin specimen with the fistulizing areas measuring 1.9×0.8×0.8 cm, and the other specimen measuring 1.7 cm, corresponding to the breast tissue beyond the fistulas, measuring 1.7×1×0.2 cm. Histopathological evaluation of the specimen showed a chronic, granulomatous inflammatory process, with exudative foci and formation of a fistulous tract, chronic inflammatory lymphoplasmacytic reaction, fibrosis, and giant cell reaction. Screening for fungi (Groccot) showed small, clustered yeast-like structures in the cytoplasm of macrophages, suggestive of histoplasmosis. The patient's clinical tests included hemoglobin of 9 and a white blood cell count of 3,500, with a normal differential count. Screenings for HIV, hepatitis B, and hepatitis C were negative, fasting blood glucose was normal, and liver function was normal. The anemia investigation revealed only a ferroprivic component because of the vegetarian diet. The patient was subjected to general chest and abdominal examinations with no abnormalities. The patient was started on itraconazole 200 mg a day for 1 year, with no relapse until the end of the treatment.