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Images in Infectious Diseases

Bone involvement in paracoccidioidomycosis

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An 8-year-old immunocompetent boy presented with fever, adynamia, hepatosplenomegaly, and scattered erythematous pustular lesions on his upper limbs (**Figure 1A**) that occurred in the last three months and recently evolved to pain and functional inability of his left hand. Computed tomography showed multiple well-delimited osteolytic lesions without sclerotic halo or contrast enhancement affecting his left ulna, metacarpals, and phalanges (**Figures 1B-D**), with no evidence of periosteal reaction. Histopathological analysis of the bone lesion on the second right metacarpal revealed fungal elements compatible with *Paracoccidioides brasiliensis.* Treatment was initiated with itraconazole (5 mg/kg/day orally), and the patient showed progressive clinical improvement.

Osteoarticular involvement by paracoccidioidomycosis results from lymphohematogenous dissemination, with a primary focus in the lungs, predominantly in men aged 20-40 years[1-3]. Clinically, most cases are asymptomatic, but patients may present with pain, edema, and heat sensation in the lesion area.

The disease can affect any bone, but most frequently affects the clavicle, ribs, scapula, and sternum; although rare, lesions can develop in the radius and phalanges[1-3]. On the long bones, lesions usually originate in the medullary cavity of the diaphysis and extend to the metaphysis and epiphysis, which are the most affected sites owing to their greater vascularization[1,3]. The commonest radiographic characteristics are distinctly outlined lytic lesions with no marginal sclerosis and little or no periosteal reaction, similar to our case[1-3]. The most frequently considered differential diagnoses are neoplasms, bone metastases, histiocytosis, lymphoproliferative disorders, and infections caused by other agents, including sporotrichosis.

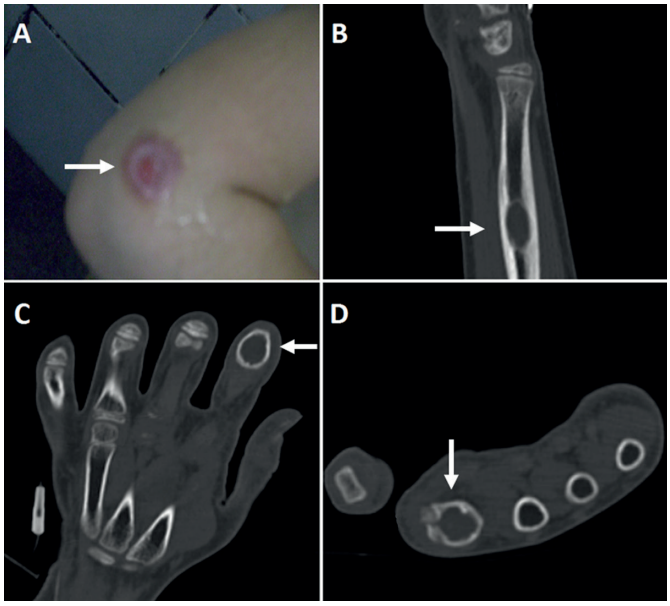

FIGURE 1: (A): erythematous pustular lesion on the lateral aspect of the elbow. **(B-D):** computed tomography showing multiple well-delimited osteolytic lesions without a sclerotic halo (arrows) affecting the left ulna, metacarpals, and phalanges **(B-D)**, with no evidence of periosteal reaction.

Conflict of Interest

The authors declare that there is no conflict of interest.

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