Medical Image of the Week: Cutaneous Coccidioidomycosis

Figure 1. Right distal anterior thigh. Fungal culture grew *Coccidioides immitis* from biopsy.

A 46-year-old Hispanic man with no known past medical history presents to his primary care physician for a progressively worsening “rash” located over his right thigh. Patient described the lesion as raised, scaly, and itchy. It has been “growing” for the past one year and started out as a small “pimple”. Patient denied any trauma to the effected region over this time period. Surgical history was significant for a splenectomy 15 years prior that was needed after a traumatic accident. He works in construction and lives in southern Arizona. He denied alcohol, tobacco and or illicit drug use. Patient has attempted to treat this skin lesion with over the counter hydrocortisone ointment with no relief. He denied any other associated symptoms including fever/chills, headache, vision changes, night sweats, weight loss, cough, shortness of breath, and or joint pains. Vital signs were stable upon presentation. Physical exam was entirely benign other than the isolated skin lesion shown above (Figure 1). It measured roughly 5cm at its greatest dimension and was located just superior the right knee on the anterior portion of the distal thigh. Nodularity was appreciated upon palpation but no tenderness was noted. Areas of erythema were non-blanching. Small satellite lesions were seen on the perimeter.

He was sent to a dermatologist and biopsies were performed. Light microscopy and culture confirmed the diagnosis of cutaneous coccidioidomycosis. Initial laboratory work revealed a normal complete blood count and complete metabolic panel. Serum coccidioides IgM antibody was negative but IgG was confirmed to be positive with a reflex complement fixation titer of 1:16. Chest X-ray was normal. Patient was started on oral fluconazole 400mg daily. Repeat coccidioides
IgG titers decreased to 1:8 at a four-week follow-up. Patient has been tolerating the medication well and skin lesion has begun to regress.

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