Tropical pyomyositis in a patient with hyperimmunoglobulin E syndrome

Sir,

A 19-year-old woman with skeletal and connective tissue abnormalities characterized by scoliosis, joint hyperextensibility and high palate, and a previous history of recurrent respiratory and skin infections, presented with acute fever and soft subcutaneous nodules with no phlogistic sign on the chest or limbs. Computed tomography (CT) of the chest demonstrated peripheral lung abscesses, bronchiectasis, and pneumatoceles, some with air–fluid levels [Figure 1a]. Abdominal CT showed multiple hypodense collections suggesting abscesses in the pelvis, abdominal and thoracic walls, and left adrenal region [Figure 1b and c]. *Staphylococcus aureus* was identified in material drained from intramuscular collection in the left thigh, leading to the diagnosis of tropical pyomyositis. The patient's total serum immunoglobulin E (IgE) level was 10,900 UI/L and the National Institutes of Health (NIH) score was >60, suggestive of autosomal dominant hyper-IgE syndrome (AD-HIES).[1-3]

AD-HIES is a rare multisystemic immunodeficiency related to STAT3 mutations and characterized by eczema, high serum IgE levels (>2000 IU/mL), and recurrent skin and lung infections, caused mainly by *S. aureus*. It is also associated with nonimmunological features composing the NIH score.[1-3] Pneumatoceles and bronchiectasis result from aberrant healing of pneumonia.[1-3] AD-HIES has been associated with recurrent infections, mainly on the skin, lungs, and liver. To our knowledge, no previous report has described tropical pyomyositis in a patient with AD-HIES. This case demonstrates a rare complication of AD-HIES and

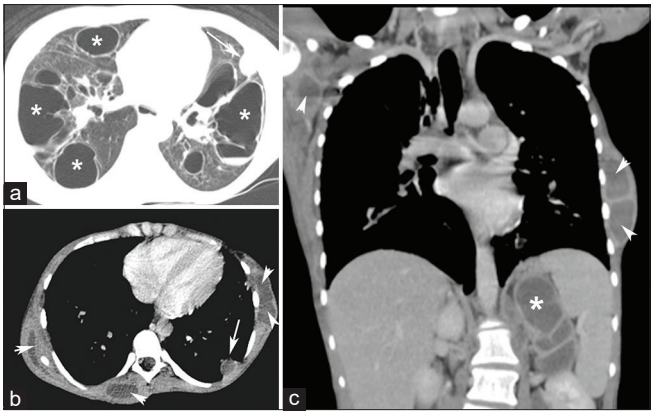

Figure 1: (a) Computed tomography of the chest showing thin-walled pneumatoceles (asterisks) with air–fluid level and septae, associated with bronchiectasis and a peripheral nodule. The mediastinal window setting (b) demonstrates a peripheral nodular lung abscess (arrowheads) and intramuscular abscesses on the chest wall (arrows). Coronal reconstruction (c) reveals numerous intramuscular collections and intra-abdominal abscesses, most with peripheral contrast enhancement, on the left psoas muscle and in the left adrenal region (white asterisks). Note also the abscesses on the chest wall (arrows)

the importance of CT in the diagnosis of asymptomatic collections in affected patients, especially in the absence of inflammatory signs.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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