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elements and in the sternum, scapulae, ribs, and pelvic bones. A few sclerotic foci were also noted in the T4 and T5 vertebral bodies. No metabolically active lymphadenopathy was identified. A large metabolically active soft tissue mass was associated with the sternal lesion. A maximum SUV of 3.7 was seen in some of the skeletal lesions. Multiple metabolically active lung nodules were seen in both upper lobes and in the apical segment of the left lower lobe, with a maximum SUV of 1.5. On delayed images, there was significant increase in the SUV value of the majority of the lesions. A working diagnosis of skeletal metastases was considered. Biopsy from the sternal lesion ruled out malignancy and was indicative of tuberculosis. Biopsy from another site (left ilium) confirmed the diagnosis of tuberculosis.

Tuberculosis can have a varied presentation. There are reports of metabolically active breast masses with extensive axillary, cervical, and mediastinal lymphadenopathy that were initially mistaken for breast cancer with extensive lymph nodal metastasis but were later confirmed to be of tuberculous etiology.[1]

The above cases demonstrate the inadequacy of PET in the presence of tuberculosis. The associated diagnostic CT scan, though still not very specific, can be very useful in demonstrating the morphological details, particularly when used with intravenous contrast. Necrotic lymph nodes on contrast-enhanced CT scan (CECT), centrilobular lung nodules on high-resolution CT scan of the lungs, and so forth tissue calcifications etc., can help in arriving at a confident diagnosis of tuberculosis. In high-prevalence geographic regions like India, tuberculous etiology should always be considered in the differential diagnoses and must be ruled out before a diagnosis of malignancy is made.

Newer and more specific radiotracers like positron-emitter labeled antituberculous drug molecules may help to differentiate tuberculosis from cancer and nontuberculous inflammatory processes in the future.[2]

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References

Figure 1: USG shows a well-defined cyst (arrow) with an echogenic scolex (arrowhead), in the subcutaneous tissues
The second patient was a 35-year-old man presenting with a painful swelling on the right side of the anterior abdominal wall for 8-10 days. On examination, the swelling was tender and hard and the skin overlying the swelling was inflamed. There was no history of fever or trauma. Clinically, it was diagnosed as an abscess. On high-resolution USG, there was a small cyst of size 3 mm, with a surrounding 15 × 22-mm hypoechoic area in the left rectus abdominis muscle [Figure 2]. Based on these findings, a diagnosis of intramuscular cysticercosis with surrounding inflammatory phlegmon in the rectus abdominis muscle was made.

In both these cases no further investigations were done. The patients recovered fully after treatment with albendazole and corticosteroids.

High-resolution USG plays an important role in establishing the diagnosis of muscular and subcutaneous cysticercosis. The salient diagnostic feature of a cysticercus granuloma is the presence of an oval or rounded well-defined cystic lesion, with an eccentric echogenic nidus within. If this picture is seen in a subcutaneous or intramuscular swelling, the diagnosis of cysticercosis can be made with great confidence and no further investigations are required; biopsy or the less reliable fine needle aspiration cytology (FNAC) can be avoided. These patients can be managed conservatively and the diagnosis can be confirmed by the therapeutic response.⁴

References


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Figure 2: USG shows a cystic lesion (arrow) with a hypoechoic area (arrowhead) in the left rectus abdominis muscle