

Uncommon Presentation Of Fungal Granuloma In The Right Knee

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INTRODUCTION:

Fungal granulomas in the knee are rare. Subcutaneous fungal infections often appear as nontender nodules, leading to misdiagnosis as benign lesions. These infections can manifest as cysts, plaques, ulcers, scaly lesions, or abscesses. This case demonstrates granulomatous inflammation from fungus, presenting as a firm subcutaneous nodule, initially misdiagnosed as a benign tumor.

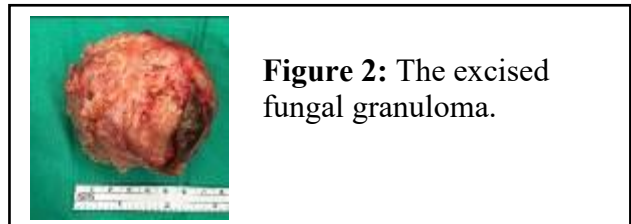
REPORT:

A 66-year-old Malay man presented with a gradually enlarging, painless right knee swelling over three months. On examination, a soft, mobile swelling was noted on the medial knee, with no skin changes or tenderness. The knee's range of motion was normal. X-ray showed soft tissue opacities, and MRI revealed a well-encapsulated, cystic lesion (8.4 cm x 7.2 cm x 7.3 cm), with no intra-articular involvement.

The patient underwent excision biopsy, with the lesion being firm, well-encapsulated, and had feeding vessels with a stalk. Histopathology revealed a 170-gram fibrocollagenous cyst wall with granulomas containing epithelioid histiocytes, multinucleated giant cells, and fungal bodies, with positive Periodic Acid-Schiff and Gomori's Methenamine Silver stains, confirming fungal infection. No malignancy was found. The post-operative recovery was uneventful, with a well-healed incision.

DISCUSSION:

Fungal granulomas are rare in the musculoskeletal system, and presentation as soft tissue masses in the knee is even rarer. Their nonspecific symptoms make diagnosis challenging. In this case, a painless, enlarging swelling without infection signs initially suggested a benign tumor or cyst. The absence of fever or redness ruled out acute infection. Surgical excision successfully removed the mass and prevent recurrence. Antifungal



treatment may be needed for deep tissue involvement, but surgery was sufficient here.

CONCLUSION:

Fungal granulomas should be considered in the differential diagnosis of soft tissue masses, especially with slow-growing, painless swelling and in areas where fungal infections are endemic, or in immunocompromised patients. Imaging studies aid diagnosis, but histopathology remains essential for confirmation. Surgical excision is the gold standard for both diagnosis and treatment.

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