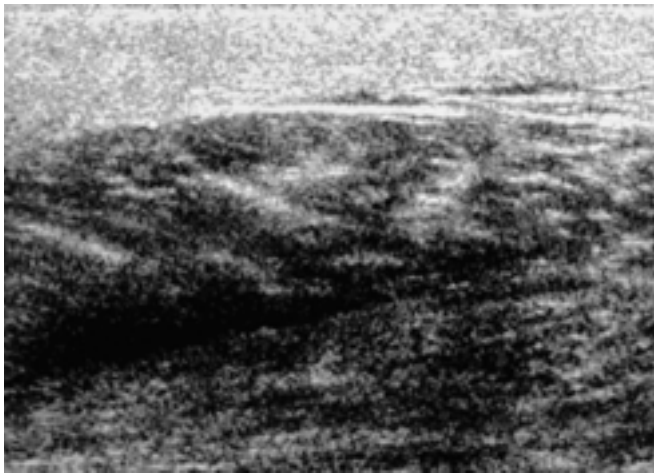


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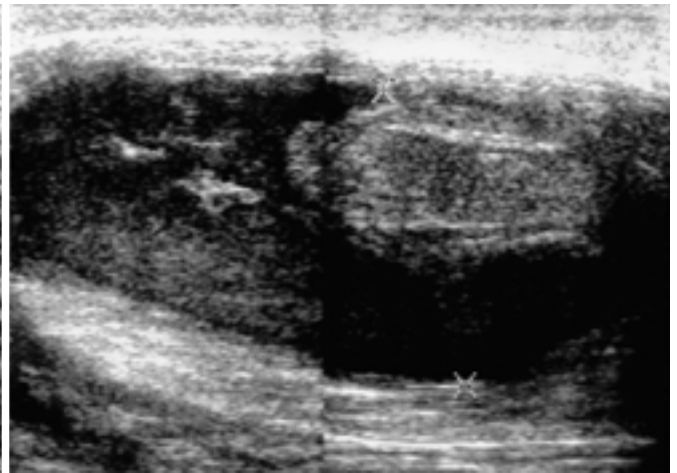
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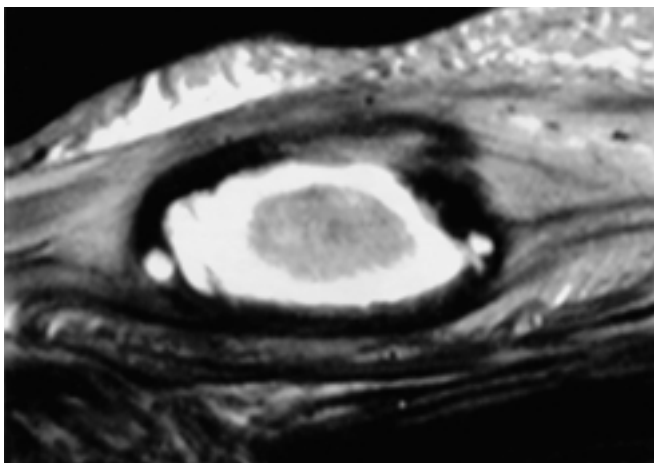
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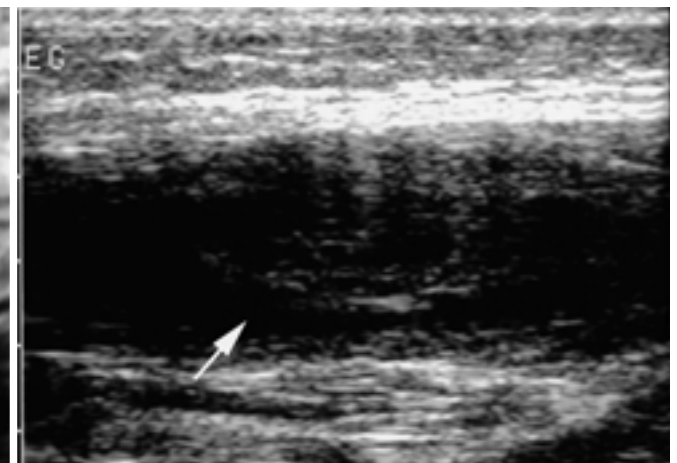
A



B



C



D

Fig. 1. A 7-year-old boy with acute myeloid leukemia.

A. Initial ultrasonography reveals diffuse swelling of left gastrocnemius muscle with illdefined hypoechoic lesions in muscle layer of left thigh with associating hyperechogenecity in subcutaneous fat layer.

B. Follow-up ultrasonography after 2 weeks shows a round central echogenic lesion surrounded by low echogenic lesion.

C. T2-weighted MR image shows a central, iso-signal intensity mass in cystic cavity representing hematoma.

D. Follow-up ultrasonography after 6 weeks reveals a remnant echogenic nodule (arrow) in previous cavitory lesion.

4
(Fig. 1D).

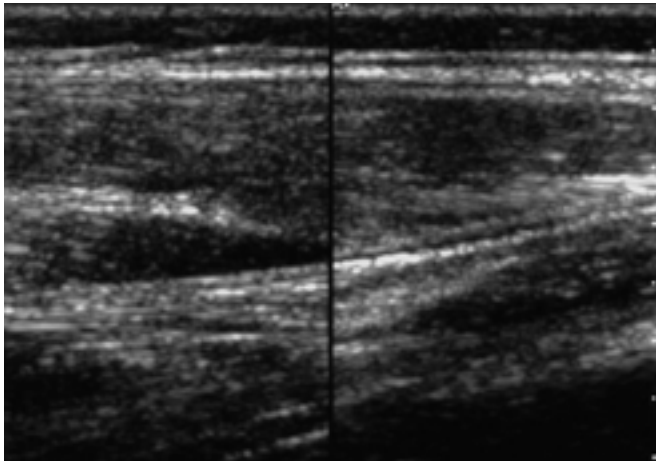
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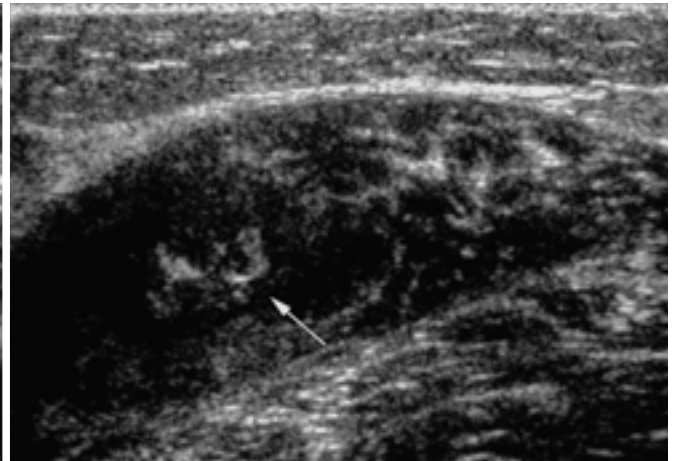
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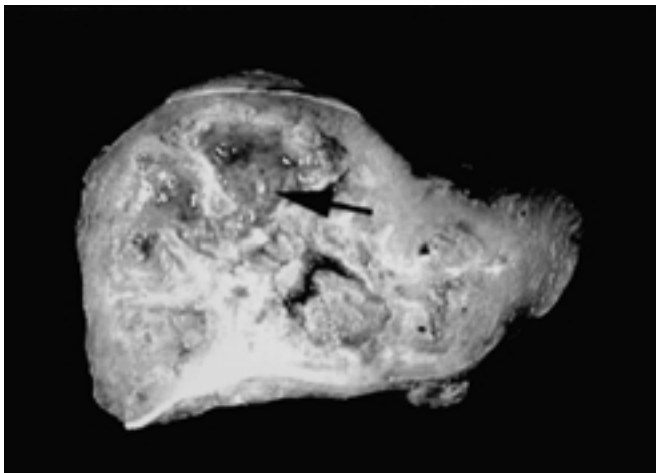
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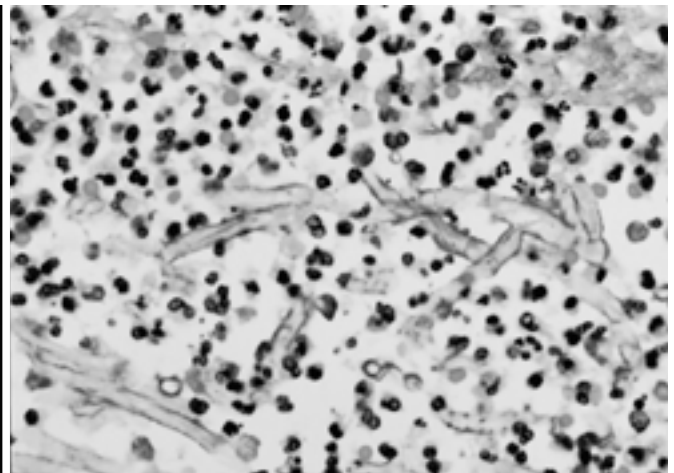
A



B



C



D

Fig. 2. A 12-year-old boy with acute myeloid leukemia.

A. Initial ultrasonography reveals diffuse swelling with low echogenicity of right gastrocnemius muscle.

B. Follow up ultrasonography after 2 weeks shows a central echogenic nodule (arrow) with surrounding hypoechoic muscle measuring about 2 × 1.5 cm.

C. A cross sectional image of excised specimen. The central hyperechoic lesion correlates with fungus ball (arrow) and surrounding hypoechoic lesions are muscle inflammation and necrosis.

D. Microscopic finding reveals necrotizing granulomatous inflammation with central fungal hyphae. The fungi consist acute branching hyphae with septation, which are morphologically consistent with of *aspergillus fumigatus*.

가 (3, 5, 8, 9). (10). (6). (10). CT MR (3). 가 (3). 3 . 5 가 , 5 - 14 1

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Fungal Myositis in Children: Serial Ultrasonographic Findings¹

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Purpose: To evaluate serial ultrasonographic findings of fungal myositis in children.

Materials and Methods: Eleven lesions caused by fungal myositis and occurring in six children were included in this study. Eight lesions in five children were histopathologically proven and the other three were clinically diagnosed. Serial ultrasonographic findings were retrospectively evaluated in terms of size, location, margin, internal echotexture and adjacent cortical change occurring during the follow-up period ranging from five days to two months.

Results: Three patients (50%) had multiple lesions. The sites of involvement were the thigh ($n=4$), calf ($n=3$), chest wall ($n=2$), abdominal wall ($n=1$) and forearm ($n=1$). Initially, diffuse muscular swelling was revealed, with ill-defined hypoechoic lesions confined to the muscle layer ($n=8$). Follow-up examination of eight lesions over a period of 5 - 10 days showed that round central echogenic lesions were surrounded by previous slightly echogenic lesions ($n=6$, 75%). Long-term follow-up of five lesions over a two-month period revealed periosteal thickening in one case (20%), and the persistence of echogenic solid nodules in four (80%). Pathologic examination showed that the central lesions correlated with a fungus ball and the peripheral slightly echogenic lesions corresponded to hematoma and necrosis.

Conclusion: Serial ultrasonographic findings of fungal myositis in children revealed relatively constant features in each case. In particular, the findings of muscular necrosis and a fungus ball over a period of 5 - 14 days were thought to be characteristic.

Index words : Children, infections
Muscles, fungi
Ultrasound (US)

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