

IMAGES IN PAEDIATRICS

Multifocal necrotizing fasciitis due to *Streptococcus pyogenes*[☆]



Fascitis necrotizante multifocal por *Streptococcus pyogenes*

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A previously healthy girl aged 3 years presented to the hospital with fever, vomiting and refusal to walk of 3 days' duration. The physical examination revealed oropharyngeal hyperaemia and tenderness on palpation in the right elbow and leg. A strep test was performed (which turned positive), along with routine blood tests and a blood culture. After 12 hours, she developed erythema and swelling in the right leg and foot (Fig. 1), very tender to the touch.

On account of suggestive features in the local MRI scan (Fig. 2), a working diagnosis of necrotising fasciitis was made, which called for urgent surgical debridement and intravenous antibiotherapy. The intraoperative wound and blood cultures were positive for *Streptococcus pyogenes*.



Figure 1 Cutaneous lesions and swelling located in the right lower extremity at 12 hours of admission.

On day 5, the patient developed pain in the right elbow and left shoulder (Fig. 3) and the fever recurred. A whole-body MRI was ordered, with visualization of features compatible with multifocal necrotising fasciitis (Fig. 3b), and calling for additional debridement. The histological examination revealed necrosis of the superficial muscular fascia.

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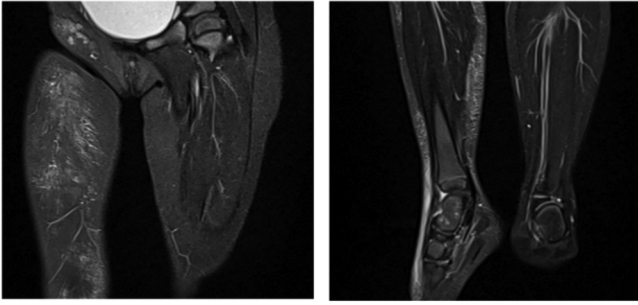


Figure 2 Magnetic resonance images of the lower extremities showing findings compatible with extensive soft tissue involvement in the form of cellulite and fasciitis in the anterior and medial compartment of the thigh and the medial compartment of the leg to the dorsum of the foot.

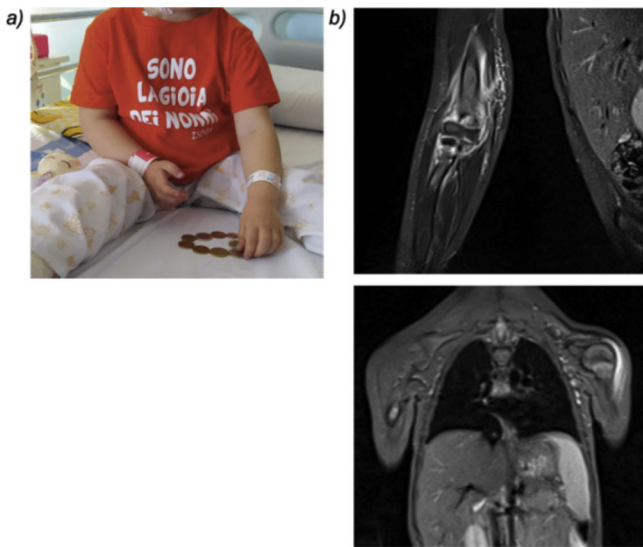


Figure 3 (a) Patient functional impairment and pain in the right elbow on day 5 of admission. (b) Whole body MRI images showing features compatible with fasciitis in the right arm, elbow and forearm and a focus of mild fasciitis in the left deltoid.

Necrotising fasciitis is a disease resulting from invasive infection by *S pyogenes* that causes necrosis of the muscular fascia and a systemic inflammatory response.¹ It manifests with fever, general malaise and local pain that appears disproportionate in relation to the cutaneous findings.¹ It is a clinical diagnosis, and imaging tests, such as MRI, can be useful.¹ Multifocal forms are rare² and thereby pose a diagnostic challenge. Early surgical debridement and initiation of intravenous antibiotherapy with penicillin and clindamycin^{1,2} are essential to reduce the associated morbidity and mortality.³

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Conflicts of interest

The authors have no conflicts of interest to declare.

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