History
Female child with soft tissue nodule.

Diagnosis
Granuloma Annulare

Additional Clinical
Gradual increase in size and pain after MRI. This atypical history prompted resection.

Discussion
SGA occurs at any time from infancy to young adulthood. Most cases occur in children, with the greatest frequency of occurrence at 2–5 years of age. The lesion most often manifests as a painless, nonmobile, subcutaneous mass with no associated overlying cutaneous abnormality. A history of antecedent trauma is extremely rare. SGA occurs in the lower extremities (often in a pretibial location) in at least 65% of cases. When lesions are subcutaneous only or the location or history (eg, rapid enlargement or pain) is atypical, however, a biopsy without imaging is appropriate. The differential diagnostic considerations for subcutaneous masses in children are extensive; they include posttraumatic, infectious, neoplastic, and syndromic or systemic disease-associated categories. Of these, the subcutaneous nodules of rheumatoid arthritis can be difficult to distinguish clinically from SGA. Imaging features include indistinct margins, with signal intensity abnormalities that extended into adjacent subcutaneous fat. The pathologic correlate to the ill-defined margin is probably the poorly circumscribed inflammatory response. Signal intensity on T1-weighted images equal to or slightly greater than that of muscle, with heterogeneous but predominantly high signal intensity on T2-weighted images and homogeneous or heterogeneous enhancement.

Findings
Ill defined plaque like region of signal abnormality in the subcutaneous fat at the dorsal aspect of the proximal forearm. Isointense signal on T1, high signal on T2 with enhancement.

Reference
Subcutaneous Granuloma Annulare: MR Imaging Features in Six Children and Literature Review
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