

Picture of the Month

Vimal Prajapati, MD; Jennifer T. Huang, MD; Brian J. Dillon, MD; Stephen E. Gellis, MD; Marilyn G. Liang, MD

A 3-MONTH-OLD GIRL WAS REFERRED TO OUR Vascular Anomalies Center for assessment of a rapidly enlarging left hand mass. Although present at birth as a mild localized swelling, significant growth was not noted until approximately 6 weeks of age. The infant's medical, surgical, and family history were unremarkable, and she was initially evaluated by her pediatrician, who suspected a vascular tumor or malformation.

Physical examination revealed a solitary, 2.5 × 3 × 2.5-cm, firm, nonmobile, subcutaneous nodule with slight erythematous to blue hue and overlying telangiectasia protruding from the left hypothenar region (**Figure 1**). A handheld Doppler device detected fast blood flow at the periphery. There were no other skin abnormalities.

Author Affiliations: Division of Dermatology and Cutaneous Sciences, University of Alberta, Edmonton, Alberta, Canada (Dr Prajapati); and Division of Vascular and Interventional Radiology, Department of Radiology (Dr Dillon), and Dermatology Program, Division of Immunology, Department of Medicine (Drs Huang, Gellis, and Liang), Children's Hospital Boston, Harvard Medical School, Boston, Massachusetts.



Figure 1. Clinical image of the left hand showing a solitary mass with overlying telangiectasia and slight erythematous to blue hue.

Radiographic studies completed prior to consultation were reviewed. Plain radiographs showed a mass of soft tissue origin on the ulnar side of the left hand without any associated bone defects, while ultrasonography further characterized the mass as being solid and highly vascular. These findings, however, were nonspecific and additional investigation was warranted.

As a result, magnetic resonance imaging was performed, which demonstrated an enhancing, infiltrative tumor that was worrisome for malignancy (**Figure 2**). The latter result prompted an ultrasonography-guided biopsy under general anesthesia to confirm the diagnosis.

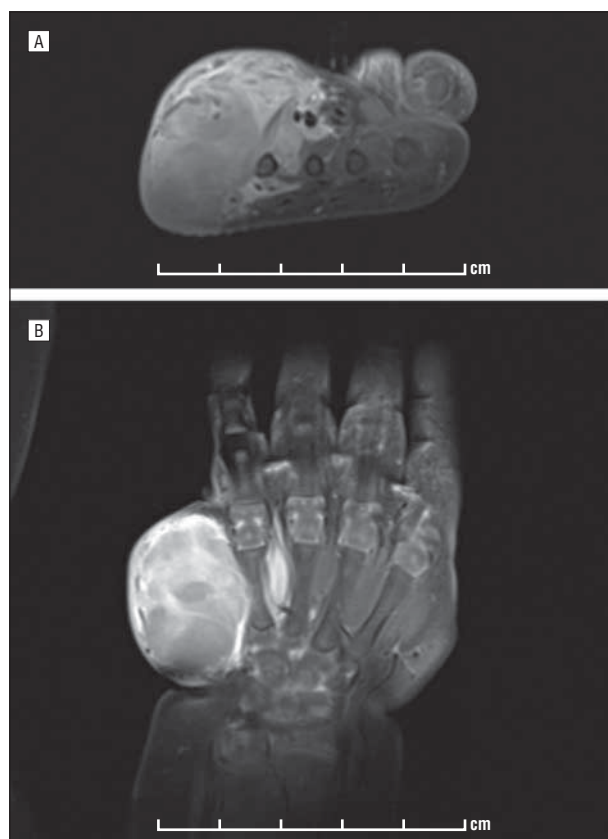


Figure 2. Axial (A) and coronal (B) T1-weighted, fat-saturated, postcontrast magnetic resonance imaging of the left hand demonstrating an enhancing mass in the hypothenar aspect with infiltrative margins extending into the fourth web space.