

Thymic Langerhans Cell Histiocytosis

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History

8 month old with sacral skin rash and failure to thrive.

Diagnosis

Thymic Langerhans Histiocytosis

Discussion

Langerhans cell histiocytosis (LCH) is a disease of disordered immunoregulation. The Langerhans cell is a monocyte derived antigen presenting cell involved in T-cell mediated immune responses and some nonimmune responses. Overproliferation and accumulation in various organs results in disease.

LCH may present as a focal or systemic disease. Prognosis is related to the number of organ systems involved and inversely related to patient age at diagnosis. The skin, skeleton, lungs, gastrointestinal system are most commonly involved although virtually any organ can be affected. Thymus involvement by LCH can be manifested by diffuse or nodular enlargement, areas of low or cystic attenuation, air cysts, and/or calcifications. The thymus is commonly involved in multisystem disease. The thymus usually normalizes on imaging with successful treatment.

Findings

CT-Multiplanar images demonstrate an enlarged thymus with scattered dystrophic calcifications and mild mass effect.

Reference

Junewick JJ and Fitzgerald NE. The Thymus in Langerhans' Cell Histiocytosis. *Pediatric Radiol* (1999); 29:904-907.





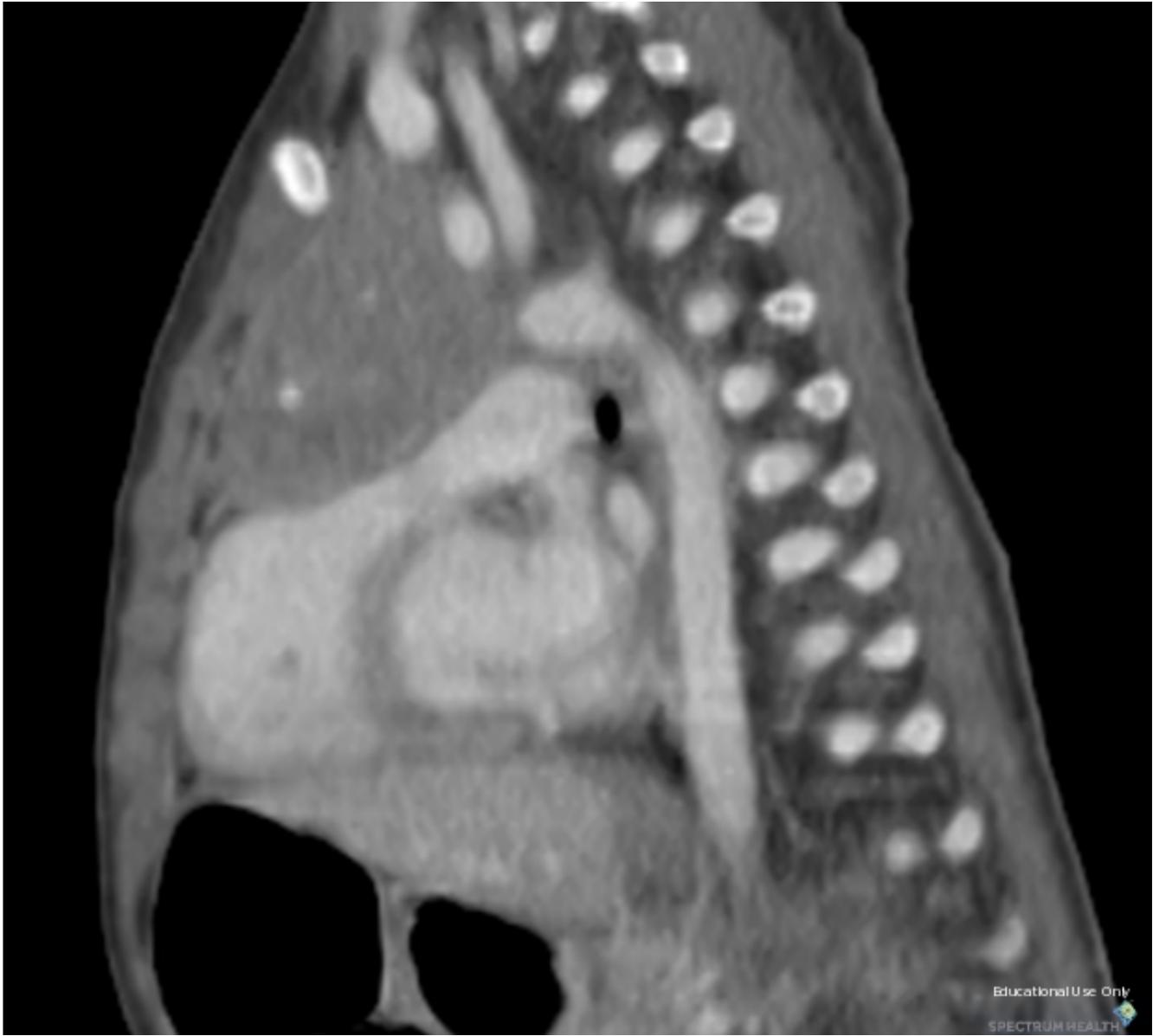
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