

## Images in clinical medicine



# Multisystemic Langerhans cell histiocytosis with orbital involvement

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## Multisystemic Langerhans cell histiocytosis with orbital involvement

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## Image in medicine

A 3-year-old male initially presented with low grade fever and scalp rash of 2 months' duration. Patient also showed macrocephaly with bilateral proptosis since birth. Work up revealed CD1a, S100, Langerin and BRAF mutation positive results. A diagnosis of multisystemic Langerhans Cell Histiocytosis (LCH) was confirmed. Multiple punched-out bony lytic lesions with geographic appearance predominantly in the frontal and parietal regions. These are classic radiographic finding for cranial vault lesions in LCH. A solitary lesion may already be suggestive. Langerhans cell histiocytosis is a rare disorder commonly affecting children with unknown etiology. It has multisystemic involvement (skin, lymph nodes,

bones, central nervous system, abdominal organs especially the liver and/or spleen). The bones are commonly involved in this disease. That's why biopsy-proven LCH should include a skeletal

survey. Langerhans cell histiocytosis can involve any bone in the human body but mainly in the axial skeleton. Over 50% occur in the skull, ribs and pelvis.



**Figure 1:** multiple punched out bony lytic lesions in the skull