



## Images in Clinical Hematology

# Reversible proptosis due to a hematological cause



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This 18-year-old-boy was diagnosed with chronic myeloid leukemia (CML) – chronic phase non-complaint to treatment. He recently presented with progressive fatigue and increasing

prominence of both eyes. On examination, he had bilateral proptosis, left more than right, with pus discharge (Figure 1A). He had pallor and splenomegaly. A complete blood count

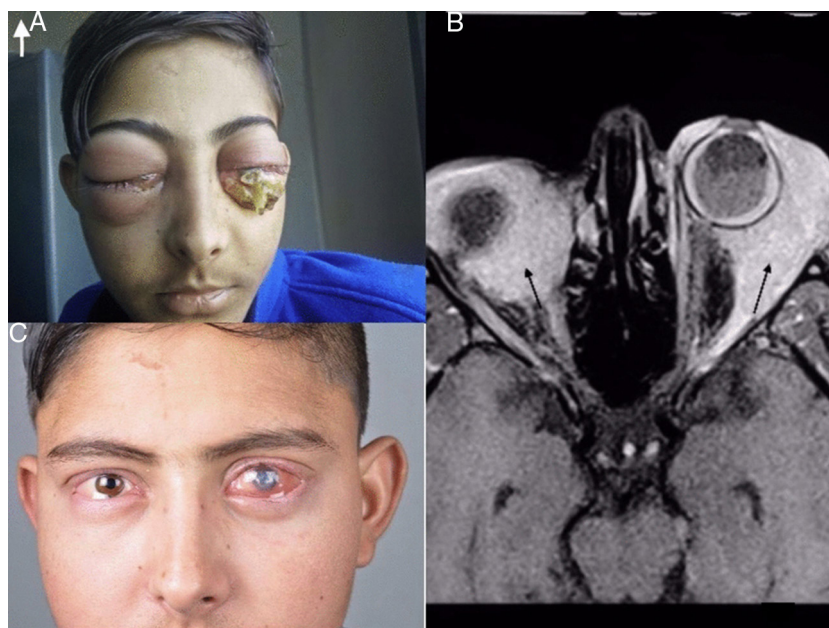


Figure 1

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showed anemia (hemoglobin 7.6 g/dL) and a raised leukocyte count ( $120.0 \times 10^3/\mu\text{L}$ ) with differential count showing a left shift. Contrast enhanced magnetic resonance imaging of the brain revealed bilateral mass lesions of the retro-orbital soft tissue (black arrows – Figure 1B) abutting the globe and involving the bones and extra-ocular muscles (Figure 1B). Fine needle aspiration cytology of the mass revealed features suggestive of granulocytic sarcoma. Bone marrow was suggestive of accelerated phase CML. The patient was treated with Dasatinib 140 mg OD and 15 Gy external beam radiotherapy for extramedullary blast crisis, and antibiotics for eye infection. The patient's proptosis was resolved after one month of therapy (Figure 1C) and he achieved complete hematological remission. Natural history of untreated CML is progression

toward blast crisis<sup>1</sup> and can present as extramedullary granulocytic sarcomas.

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### Conflicts of interest

The authors declare no conflicts of interest.

### REFERENCE

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1. Cortes J, Kantarjian HM, Giralt S, Talpaz M. Natural history and staging of chronic myelogenous leukaemia. *Baillieres Clin Haematol.* 1997;10(2):277–90.