

Images in Clinical Hematology

Reversible proptosis due to a hematological cause

Ram V. Nampoothiri, Ankur Jain, Pankaj Malhotra*

Institute of Medical Education and Research, Chandigarh, India

ARTICLE INFO

Article history:

Received 6 December 2017

Accepted 15 December 2017

Available online 17 February 2018

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

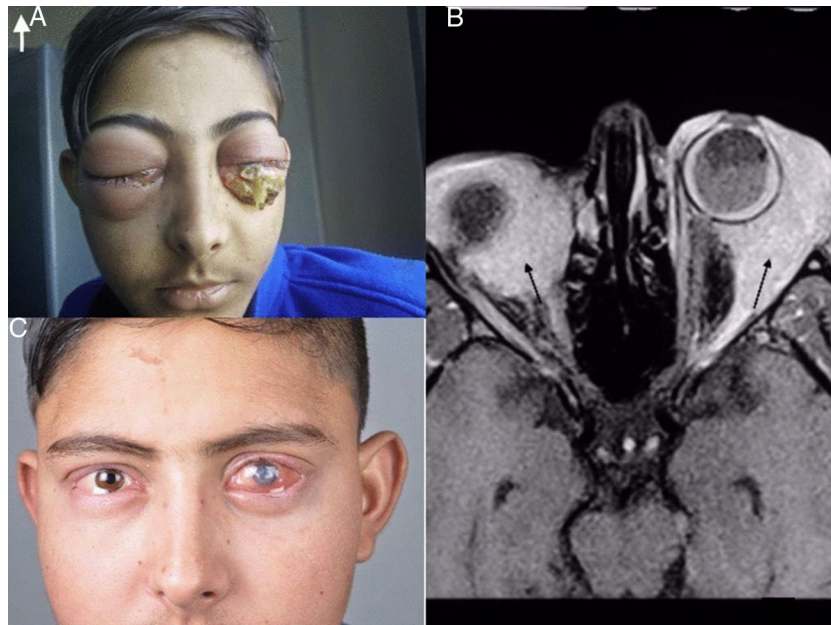


Figure 1

* Corresponding author at: Department of Internal Medicine, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh 160012, India. Tel.: +91 172 275 6680/275 6671.

E-mail address: pgimerhemat@gmail.com (P. Malhotra).

<https://doi.org/10.1016/j.htct.2017.12.001>

2531-1379/© 2018 Associação Brasileira de Hematologia, Hemoterapia e Terapia Celular. Published by Elsevier Editora Ltda. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

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 crisis¹ and can present as extramedullary granulocytic sarcomas.

Conflicts of interest

The authors declare no conflicts of interest.

REFERENCE

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