Massive splenomegaly

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DESCRIPTION

A 35-year-old healthy man presented with a 1-year history of weight loss, easy bruising, night sweats, epistaxis and abdominal pain. He denied any medical comorbidities or any history of recent travelling. On physical examination, he had mild left upper quadrant abdominal pain with massively enlarged spleen crossing the midline. A complete blood count revealed pancytopenia: haemoglobin 5.3 g/dL, white cell count 1.97 000/ μ L (80% lymphocytes) and platelet count 26 000/ μ L. Splenomegaly was confirmed on a coronal CT image of the abdomen and pelvis (figure 1) without any evidence of rupture or bleed. The patient was admitted to the hospital for a thorough evaluation. Peripheral blood flow cytometry revealed atypical cells positive for hairy cell leukaemia markers, as

well as B-cell markers. A bone marrow biopsy confirmed the diagnosis of hairy cell leukaemia.

Splenomegaly is a common finding in multiple diseases; however, massive enlargement of the spleen is seen in few conditions. Most authors define massive splenomegaly when the spleen reaches the iliac crest, crosses the midline or weighs more than 1500 g. The most common aetiologies of massive splenomegaly include haematological disorders (chronic myeloid leukaemia, agnogenic myeloid metaplasia, polycythaemia vera, essential thrombocythaemia, indolent lymphomas, hairy cell leukaemia, β -thalassaemia major), infectious diseases (visceral leishmaniasis, malaria) and infiltrative conditions (Gaucher disease).^{1 2}

The patient had a complete remission after treatment with intermittent cladribine therapy followed by rituximab.

Figure 1 CT scan of the abdomen and pelvis showing splenomegaly without any evidence of rupture or bleed.

Learning points

- ▶ The clinical manifestations of hairy cell leukaemia are the result of bone marrow, liver and spleen infiltration by malignant cells.
- ▶ Splenomegaly is a common finding in multiple diseases; however, massive enlargement of the spleen is seen in few conditions.
- ▶ Flow cytometry and bone marrow biopsy are the recommended work-up for massive splenomegaly.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 O'Reilly RA. Splenomegaly in 2,505 patients in a large university medical center from 1913 to 1995. 1913 to 1962: 2,056 patients. *West J Med* 1998;169:78–87.
- 2 Forconi F. Hairy cell leukaemia: biological and clinical overview from immunogenetic insights. *Hematol Oncol* 2011;29:55–66.

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