

Peripheral blood evidence of iron overload

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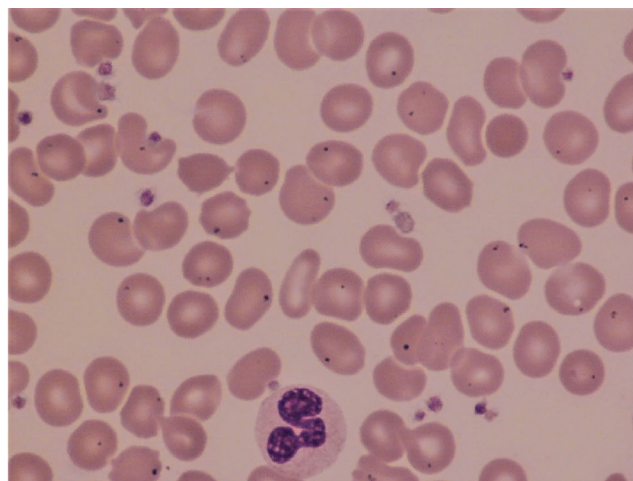
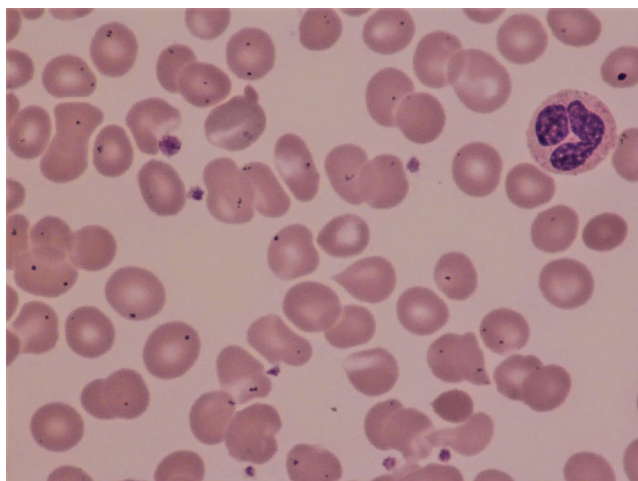
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A 19-year-old woman had a follow-up blood count and blood film 6 months after a successful allogeneic hematopoietic stem cell transplant for hemoglobin E/ β thalassemia. The patient had previously been transfusion dependent. A splenectomy had been performed at the same time as the transplantation.

Her blood count showed the following: red cell count $3.27 \times 10^{12}/L$, hemoglobin concentration 115 g/L, mean cell volume 104 fL, mean cell hemoglobin 35.3 pg and mean cell hemoglobin concentration 340 g/L. Her blood film showed the expected post-splenectomy changes: Howell–Jolly bodies, target cells and acanthocytes, with other poikilocytes and polychromatic macrocytes. However, in addition there were very numerous siderotic granules (images, $\times 100$ objective). The patient's ferritin was found to be 3766 $\mu\text{g}/L$.

Following splenectomy, small numbers of siderotic granules (Pappenheimer bodies) are seen in circulating erythrocytes. When a

hyposplenic patient has iron overload, siderotic granules can be very numerous, providing striking evidence of the iron overload.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

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