A 63-year-old man presented with symptoms of anemia. The only other symptom of note was some change in personality with unusually aggressive behavior. His blood count was as follows: hemoglobin 65 g/L, white blood cell count $6.5 \times 10^9$/L (normal differential count), and platelet count $509 \times 10^9$/L. The blood film (panel A) was leukoerythroblastic with target cells and marked basophilic stippling. Liver function test results and hematinsics were normal.

On retaking the clinical history, it was noted that he was a painter and had been working on an old house for several months, removing paint. His blood lead level was 4.9 μm/L (reference range without exposure to industrial lead is 0-0.48 μm/L) with a high 24-hour urinary lead level of 2130 nmol (normal range, 0-100). These results were consistent with severe lead poisoning. He was treated with chelation with intravenous sodium calcium edetate, intravenous fluids, and zinc supplementation. He obtained gradual improvement in psychiatric symptoms and normalization of blood count. He did not have the usual classical symptoms of lead poisoning. His bone marrow aspirate and trephine morphology showed marked dyserythropoiesis with sideroblastic change and also less marked dysplastic change in the myeloid series (panel B; Perl’s stain).
A man with anemia and a change in personality

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