A 67-year-old man developed left-sided abdominal pain while struggling to get out of a sand trap on the golf course. He visited his physician and a very large spleen was found on examination. He had been well previously and was on no medications. His brother recently died with metastatic colon cancer; otherwise the family history was negative.

Laboratory assessment revealed mild anemia with occasional oval and tear-shaped red cells. There was mild thrombocytopenia with a moderate degree of granulocytopenia. Rare lymphocytes on the peripheral smear appeared as shown in the figure. A bone marrow examination is also illustrated.

Special studies were done that added further confirmation to the diagnosis of hairy cell leukemia; the cells were TRAP-positive and B-cell phenotype with CD11c expression. He was given options for treatment including observation only. Since his pain disappeared and he was again asymptomatic, he declined treatment. However, within the next 2 years, he had 2 pulmonary infections, convincing him to agree to treatment. He preferred pentostatin given every 2 weeks rather than a week-long continuous infusion of cladribine. After 2 months, his spleen was not palpable and the pancytopenia resolved. Minimal numbers of hairy cells were still noted on the bone marrow examination. He remains well, 5 years after chemotherapy. Despite the availability of highly effective chemotherapy, hairy cell leukemia may still be managed without immediate aggressive treatment in some patients.
Pancytopenia and large spleen