

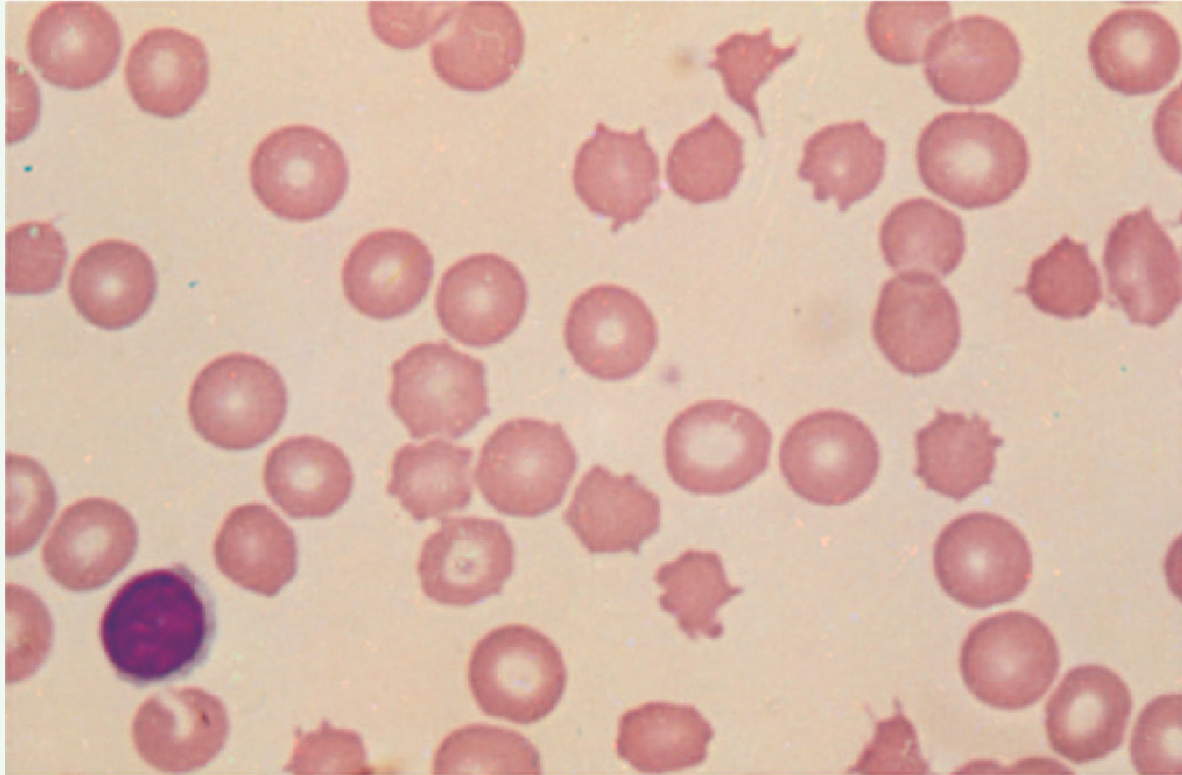


FIGURE 63-11 Spur cells. Spur cells are recognized as distorted red cells containing several irregularly distributed thorn-like projections. Cells with this morphologic abnormality are also called acanthocytes. (*From RS Hillman et al: Hematology in Clinical Practice, 5th ed. New York, McGraw-Hill, 2010.*)

Reticulocyte Count An accurate reticulocyte count is key to the initial classification of anemia. Reticulocytes are red cells that have been recently released from the bone marrow. They are identified by staining with a supravital dye that precipitates the ribosomal RNA (**Fig. 63-12**). These precipitates appear as blue or black punctate spots and can be counted manually or, currently, by fluorescent emission of dyes that bind to RNA. This residual RNA is metabolized over the first 24–36 h of the reticulocyte's life span in circulation. Normally, the reticulocyte count ranges from 1% to 2% and reflects the daily replacement of 0.8–1.0% of the circulating red cell population. A corrected reticulocyte percentage or the absolute number of reticulocytes provides a reliable measure of effective red cell production.