



**E-FIGURE 46-2** **A**, Marrow biopsy with a leukemoid reaction shows marked advanced granulocytic hyperplasia with a predominance of band and segmented neutrophils (Wright-Giemsa stain,  $\times 100$ ). **B**, Leukemoid reaction in the peripheral blood smear shows two myelocytes and numerous segmented granulocytes. An erythrocyte rouleaux formation is also seen (Wright-Giemsa stain,  $\times 100$ ). **C**, Marrow biopsy (fat-to-cell ratio of 0:100) in chronic myelogenous leukemia (CML) shows a preponderance of periodic acid–Schiff (PAS)–positive myelocytes. A small cluster of PAS-negative erythroid precursors, a megakaryocyte, and several phagocytes are also seen (PAS stain,  $\times 100$ ). **D**, Marrow smear in CML shows disorderly granulopoiesis with increased myelocytes relative to metamyelocytes (i.e., hiatus leukemicus) and frequent mature forms (Wright-Giemsa stain,  $\times 250$ ). **E**, Peripheral blood smear in CML shows two myeloblasts, one myelocyte, one metamyelocyte, one segmented neutrophil, one eosinophil, and marked thrombocytosis (Wright-Giemsa stain,  $\times 100$ ). **F**, Another field in the blood smear of the same patient shows increased numbers of basophils (Wright-Giemsa stain,  $\times 250$ ). **G**, The peripheral thrombocytosis in the same case includes medium-sized and giant platelets (the latter are the same size as the erythrocytes) (Wright-Giemsa stain,  $\times 250$ ). (Courtesy Maurice Barcos, MD, PhD, Chief of Hematopathology, Roswell Park Cancer Institute, Buffalo, N.Y.)