



E-FIGURE 45-4 **A**, Marrow biopsy section for del(5q)-associated myelodysplastic syndrome (MDS) shows numerous hypolobulated and dysplastic megakaryocytes, moderate granulopoiesis and erythropoiesis, and hemosiderin-laden macrophages (periodic acid–Schiff stain, $\times 100$). **B**, Corresponding marrow smear shows trilineage dysplasia, including hypogranular myelocytes and band granulocytes, disorderly erythropoiesis with an increase in megablastoid pronormoblasts with a binucleate form, and a hypolobated megakaryocyte with an immature nucleus showing semidispersed chromatin and ample cytoplasm with deficient platelet formation (Wright-Giemsa stain, $\times 250$). **C**, Marrow smear from another case of MDS. Dysplastic granulopoiesis with hypogranular myelocytes shows immature nuclei with visible nucleoli, giant metamyelocytes, pseudo-Pelger-Huët neutrophils with typical pince-nez bi-segmented nuclei, and a neutrophil with quadri-segmented, jagged-edge nuclei. An early lobated megakaryocyte with dense chromatin and scant cytoplasm with early giant platelet formation is also seen (Wright-Giemsa stain, $\times 250$). (Courtesy Maurice Barcos, MD, PhD, Chief of Hematopathology, Roswell Park Cancer Institute, Buffalo, N.Y.)