Refractory Anemia with Ring Sideroblasts

Authors: Peter Maslak

Category: Myeloid Neoplasms and acute leukemia (WHO 2016) > Myelodysplastic Syndromes (MDS) > MDS with Ring Sideroblasts (MDS-RS)

Number of Units: 7

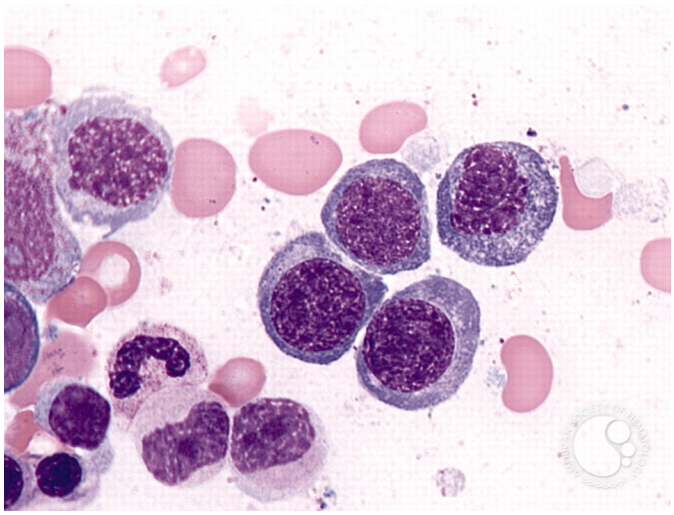
Refractory Anemia with Ring Sideroblasts - 1.

Image ID: 2625

Authors: Peter Maslak

Category: Myeloid Neoplasms and acute leukemia (WHO 2016) > Myelodysplastic Syndromes (MDS) > MDS with Ring Sideroblasts (MDS-RS)

Description: Bone marrow aspirate is hypercellular with erythroid hyperplasia and prominent dyserythropoiesis.



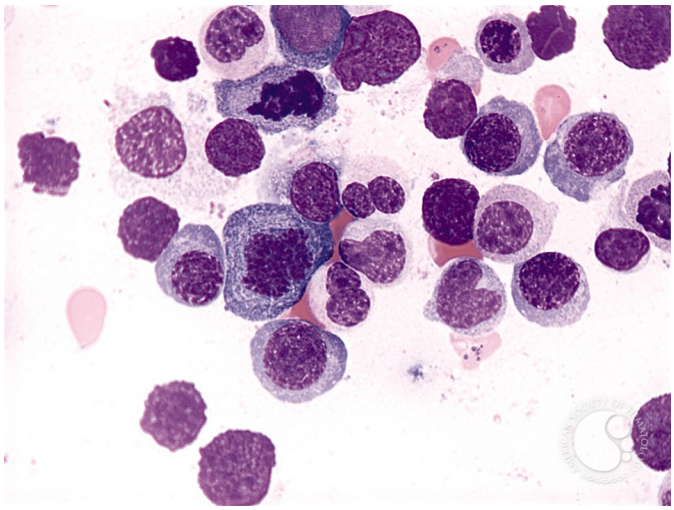
Refractory Anemia with Ring Sideroblasts - 2.

Image ID: 2626

Authors: Peter Maslak

Category: Myeloid Neoplasms and acute leukemia (WHO 2016) > Myelodysplastic Syndromes (MDS) > MDS with Ring Sideroblasts (MDS-RS)

Description: Nuclear-cytoplasmic asynchrony is characteristic of dysplastic erythroid elements.



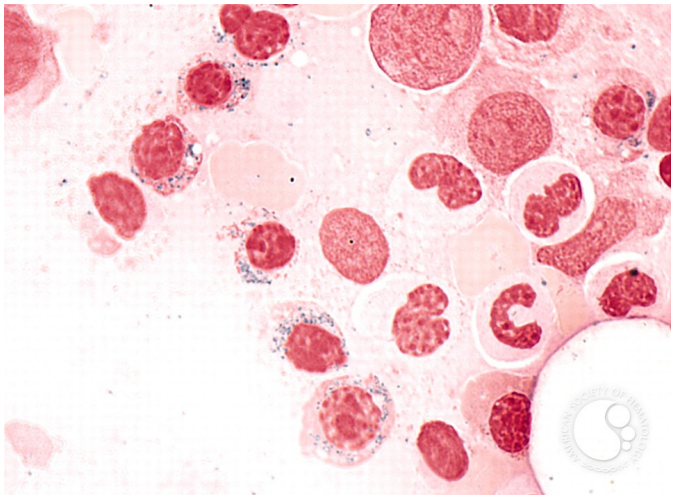
Refractory Anemia with Ring Sideroblasts - 3.

Image ID: 2627

Authors: Peter Maslak

Category: Myeloid Neoplasms and acute leukemia (WHO 2016) > Myelodysplastic Syndromes (MDS) > MDS with Ring Sideroblasts (MDS-RS)

Description: Prussian blue stain is used to identify ring sideroblasts.



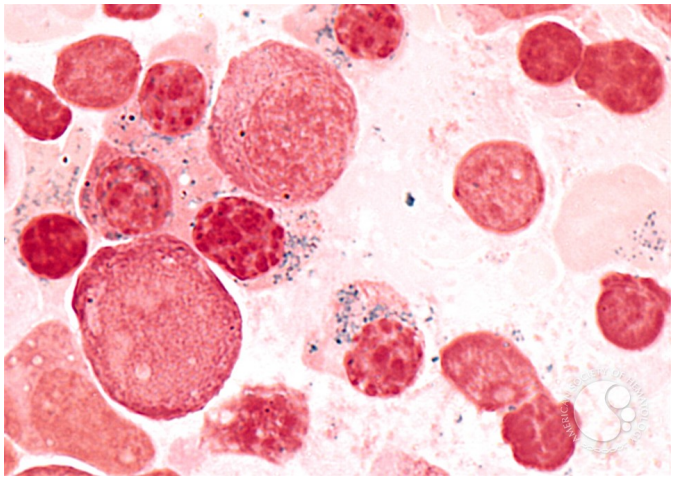
Refractory Anemia with Ring Sideroblasts - 4.

Image ID: 2628

Authors: Peter Maslak

Category: Myeloid Neoplasms and acute leukemia (WHO 2016) > Myelodysplastic Syndromes (MDS) > MDS with Ring Sideroblasts (MDS-RS)

Description: Iron may be distributed in the mitochondria in a typical "necklace" pattern around the nucleus or as large clusters within the cytoplasm.



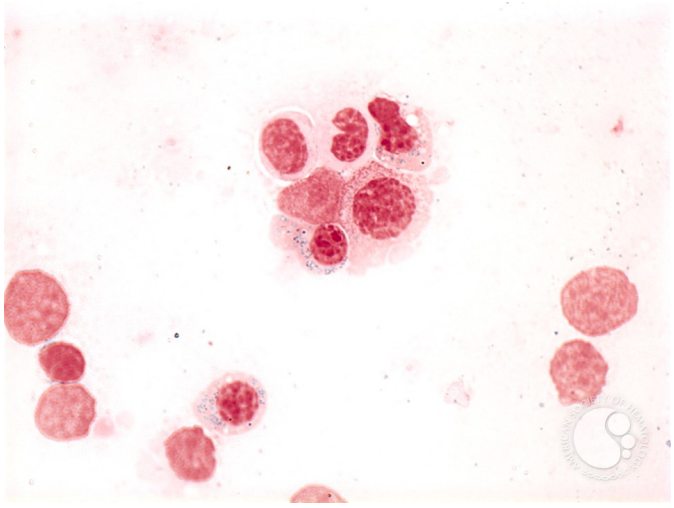
Refractory Anemia with Ring Sideroblasts - 5.

Image ID: 2629

Authors: Peter Maslak

Category: Myeloid Neoplasms and acute leukemia (WHO 2016) > Myelodysplastic Syndromes (MDS) > MDS with Ring Sideroblasts (MDS-RS)

Description: Ring sideroblasts are formed by abnormal deposition of iron in the mitochondria surrounding the nucleus of red cell precursors.



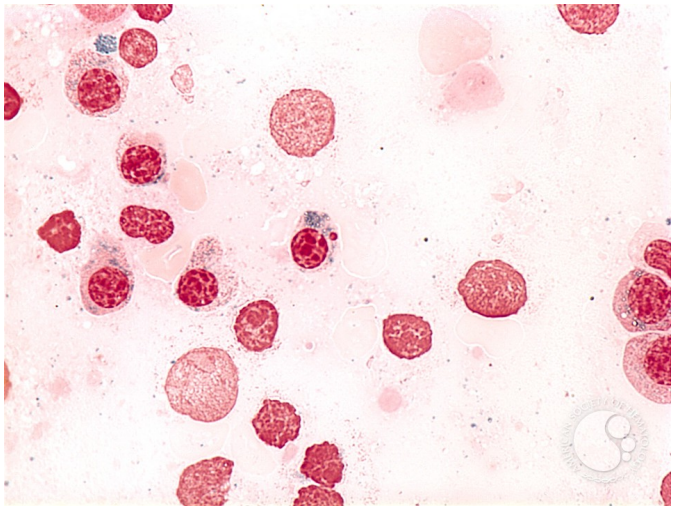
Refractory Anemia with Ring Sideroblasts - 6.

Image ID: 2630

Authors: Peter Maslak

Category: Myeloid Neoplasms and acute leukemia (WHO 2016) > Myelodysplastic Syndromes (MDS) > MDS with Ring Sideroblasts (MDS-RS)

Description: Sideroblasts constitute greater than 15% of the erythroblasts.



Refractory Anemia with Ring Sideroblasts - 7.

Image ID: 2631

Authors: Peter Maslak

Category: Myeloid Neoplasms and acute leukemia (WHO 2016) > Myelodysplastic Syndromes (MDS) > MDS with Ring Sideroblasts (MDS-RS)

Description: RARS accounts for approximately 15%-20% of the myelodysplastic syndromes.