

CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Hematology-Cell Morphology – Case 10

(A)

Two types can be separated: (a) Diffuse fine stippling, and (b) coarse more intense basophilic stippling. Fine diffuse stippling is seen as dust of fine gray granules filling the red cell. It appears mainly in polychromatophilic erythrocytes and its recovery is not usually easy, with the exception of a special attention during smear critical view. Coarse basophilic stippling is easily seen, because usually the granules are greater (figures 1 to 8, 11). This finding is rare in the adult, but frequent in neonates and infants. It appears lead poisoning, in serious chronic hemolytic anemia, such as thalassemia syndromes or hemoglobin S disease and in pyrimidine-5-nucleosidase deficiency. The visible bluish granules

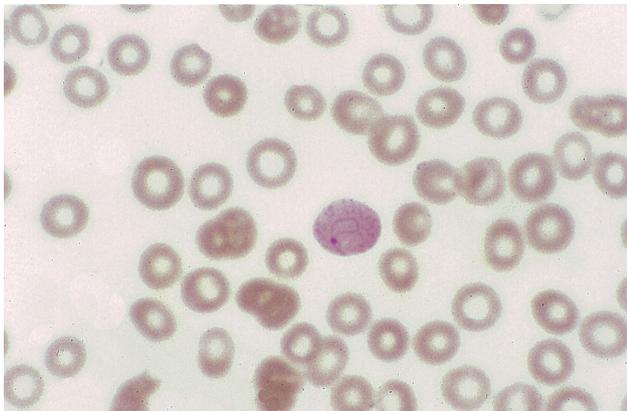


Figure 1



Figure 2

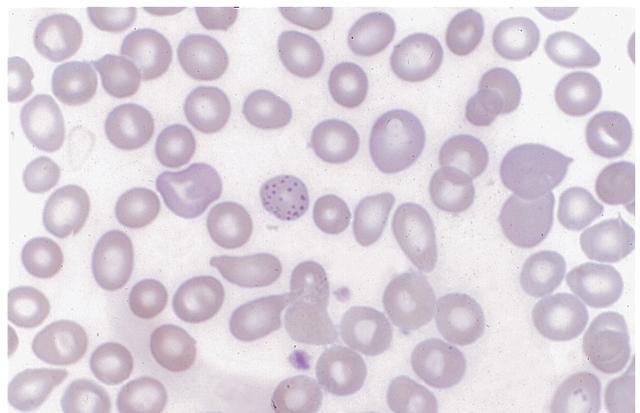


Figure 3

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ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2021, 38(2):281–284

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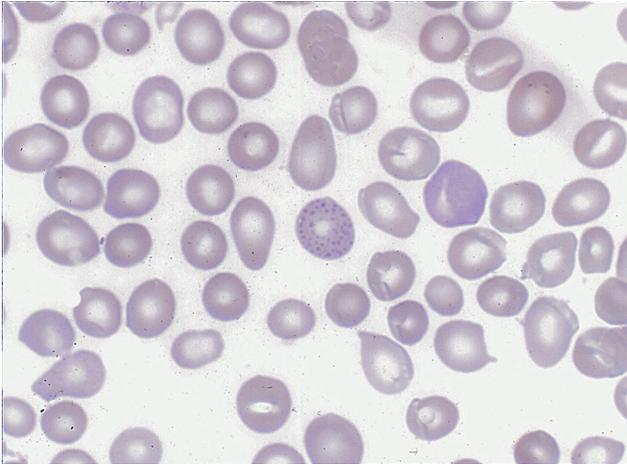


Figure 4



Figure 7

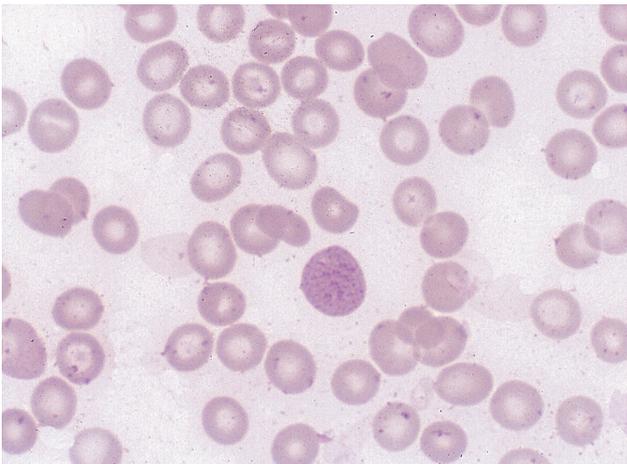


Figure 5

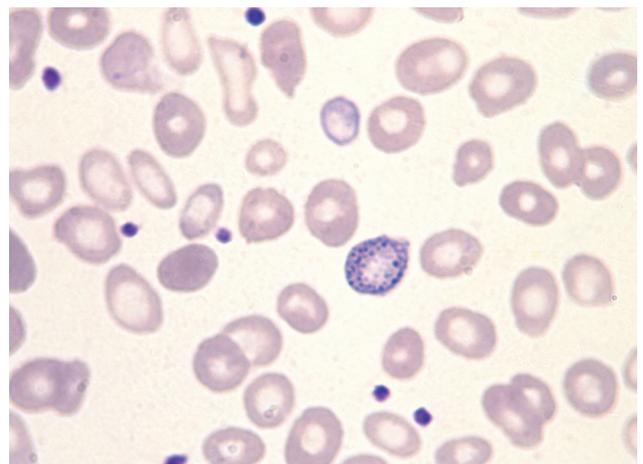


Figure 8

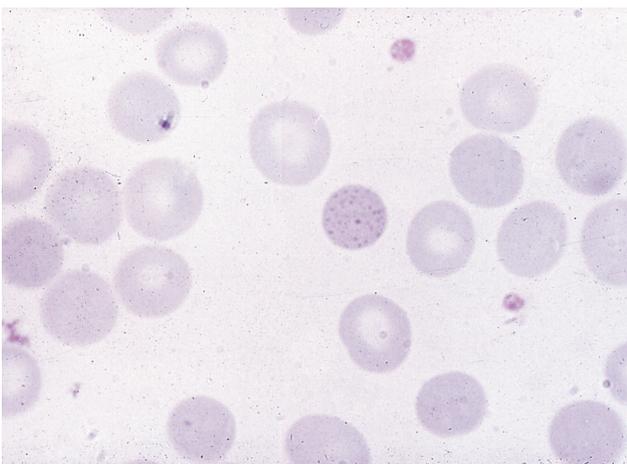


Figure 6

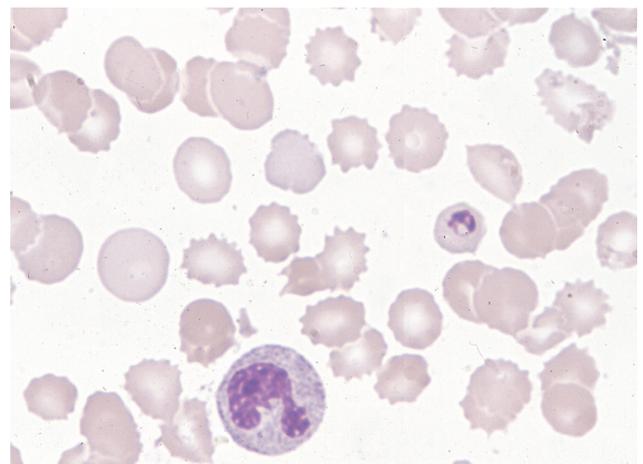


Figure 9

are usually ferric particles, RNA and mitochondria.

(B)

Intraerythrocytic solitary or multiple ring form or like an eight figure, complete or incomplete fibrillar or no filaments or reddish-blue color, which represent remnants of the nuclear membrane and, as fibers of microtubules persistence of the mitotic spindle, radiating from the centrosome during cell division which are better visible at the end of telophase and connect the nuclei of two daughter cells just after division (figures 1, and 9 to 16). When these filaments remain into the cell, they can assume a ring-like form as a result of their intracytoplasmic distribution and represent markers of abnormal mitosis. They can be shown in megaloblastic anemia, in dyserythropoiesis or in lead poisoning.



Figure 12



Figure 10

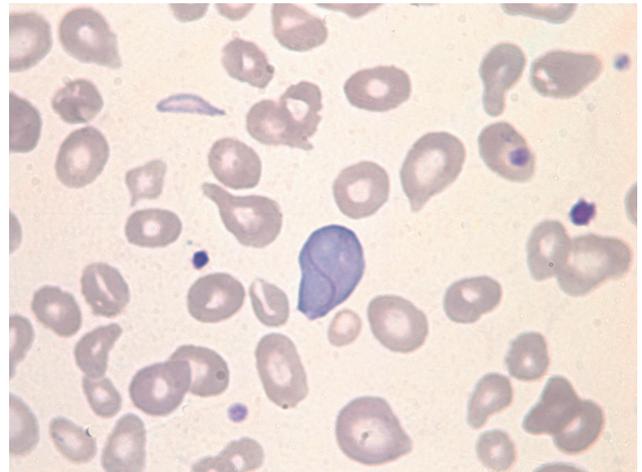


Figure 13

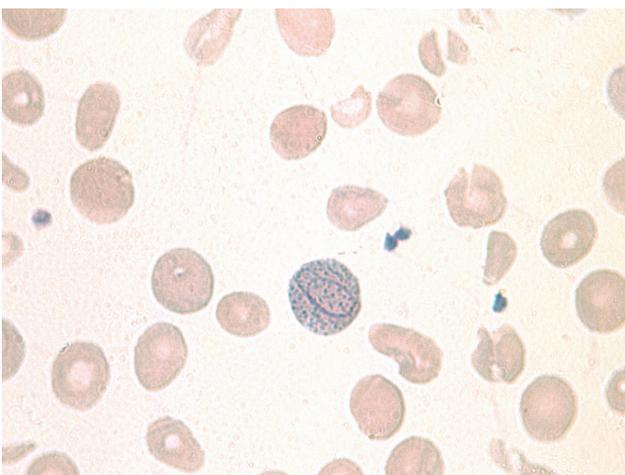


Figure 11

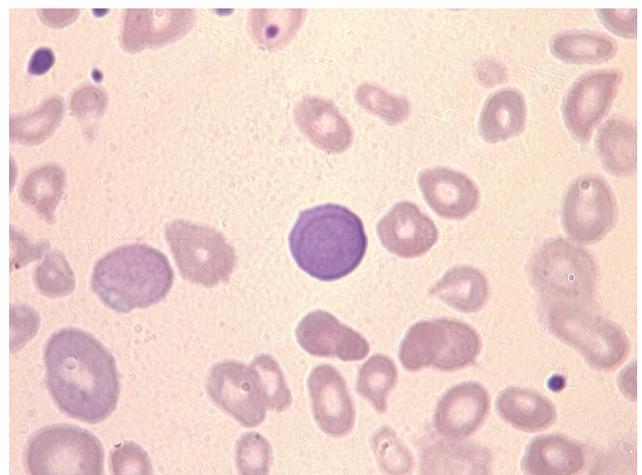


Figure 14

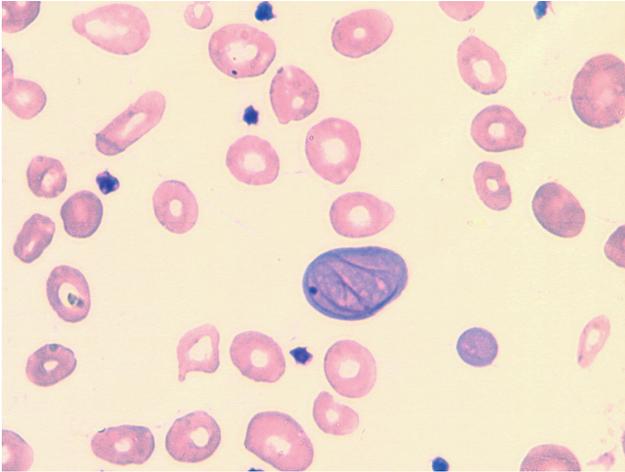


Figure 15

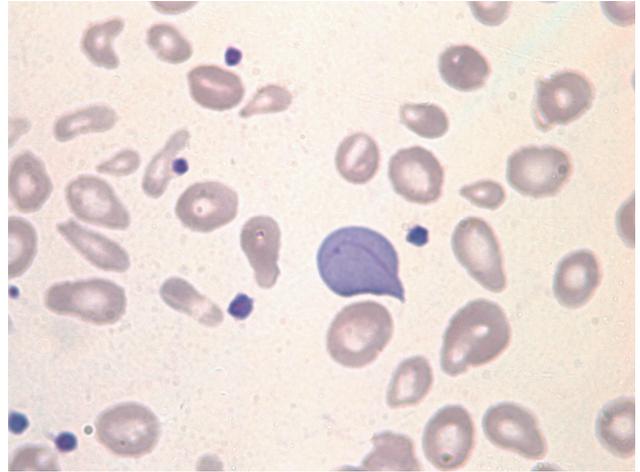


Figure 16

References

- 1. MELETIS J. *Atlas of hematology*. 3rd ed. Nireas Publ Inc, Athens, 2009:93–102

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