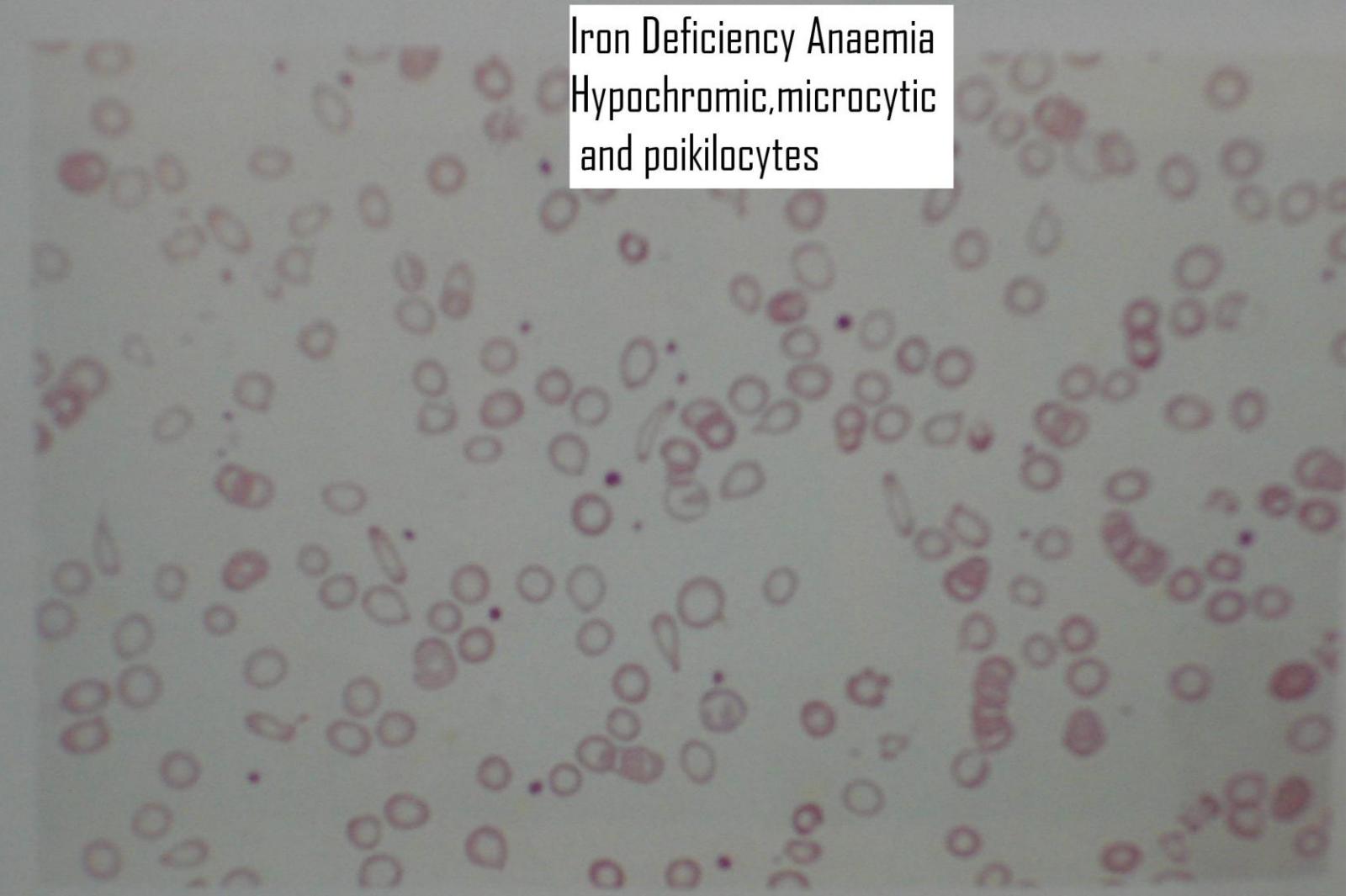


Continuation

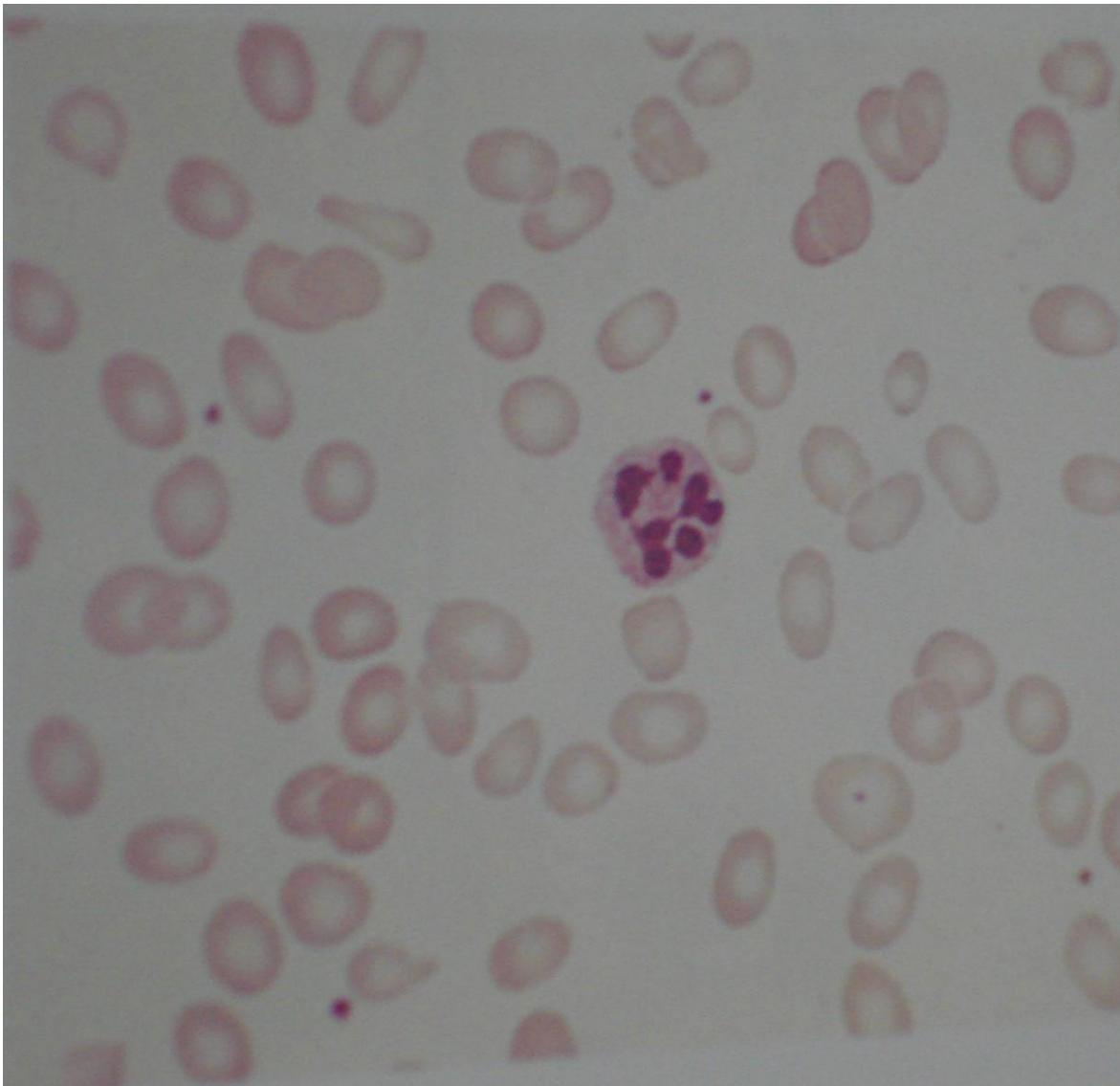
Haematology

Iron deficiency anaemia

A light micrograph of a blood smear. The image shows numerous red blood cells of varying sizes and shapes. Some cells appear smaller and more densely stained than others, which is characteristic of hypochromic and microcytic changes. A few cells exhibit irregular, somewhat star-like or notched shapes, which are typical of poikilocytosis. The overall distribution is somewhat sparse and lacks a normal uniformity.

Iron Deficiency Anaemia
Hypochromic,microcytic
and poikilocytes

Megaloblastic anaemia-Showing hypersegmented neutrophil



Megaloblastic anaemia

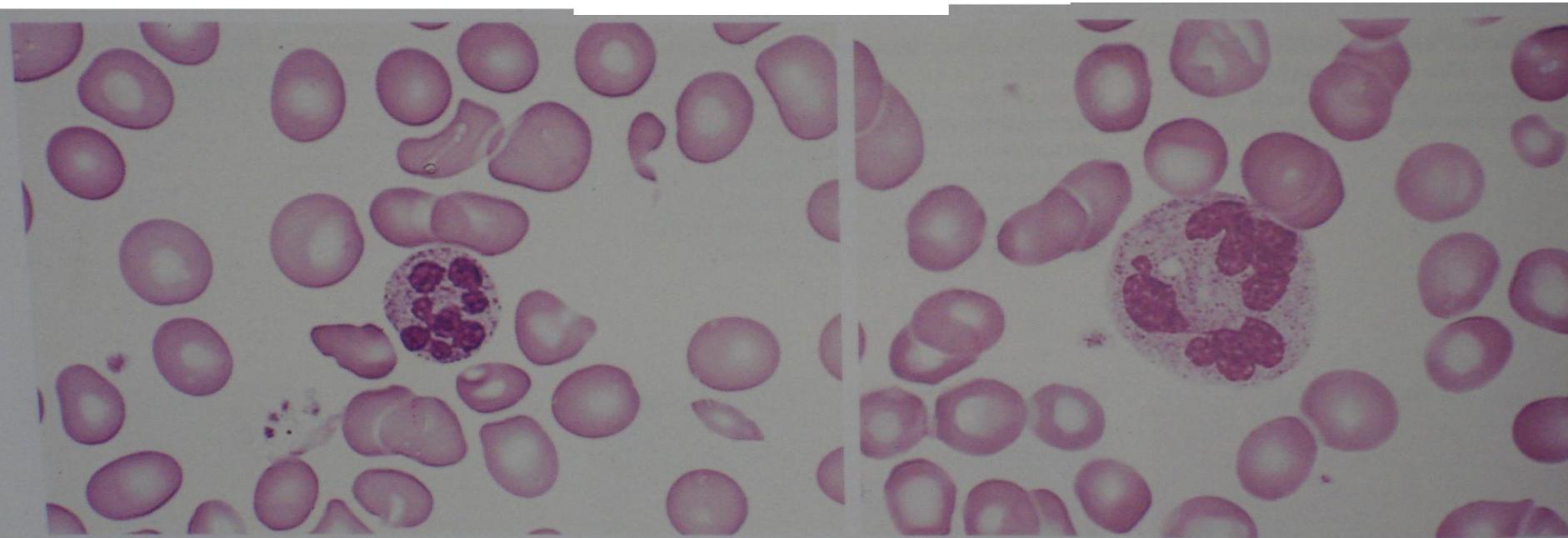


Fig. 3.13

Megaloblastic anaemia: higher power views showing (left) a hypersegmented neutrophil and (right) a hyperdiploid neutrophil or 'macropolyocyte'.

Haemolytic anaemia slide

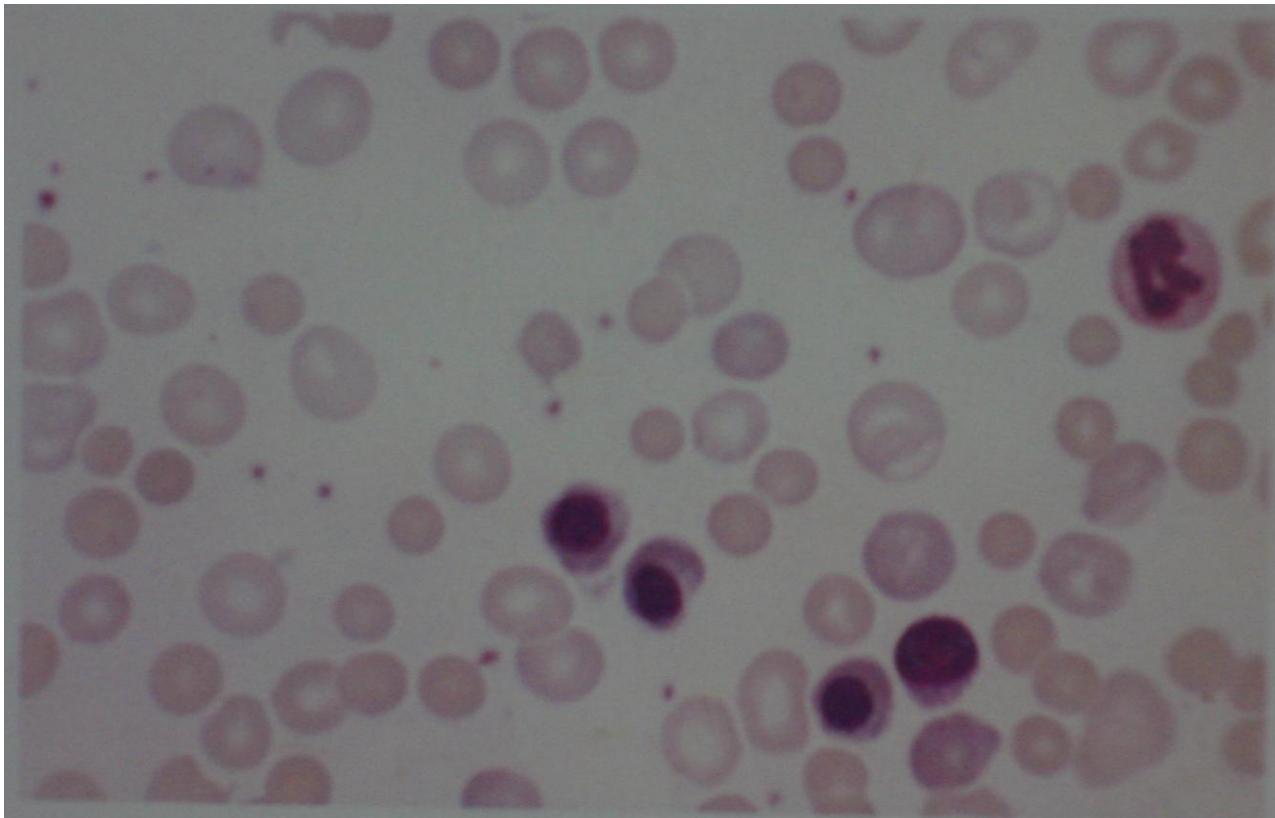
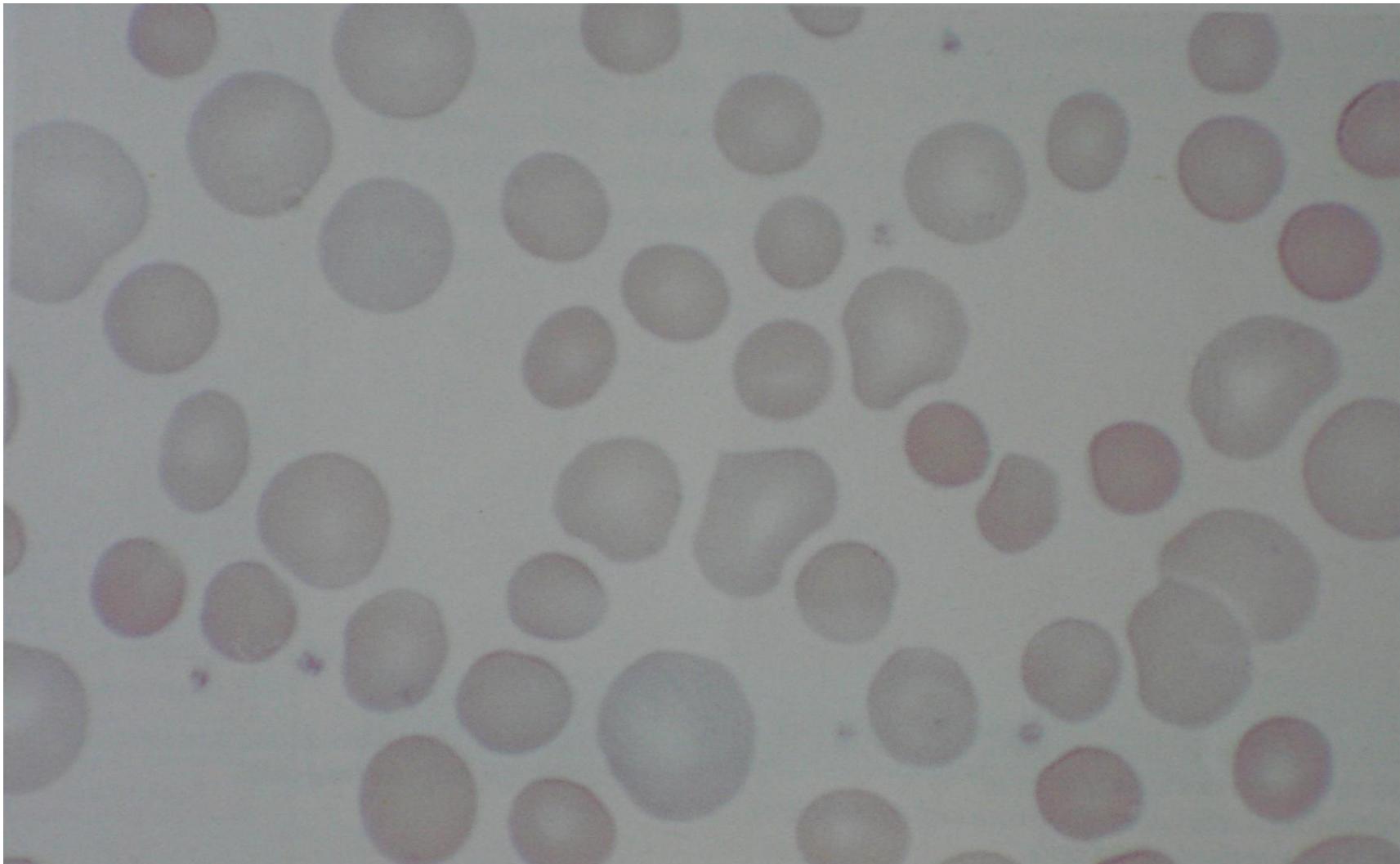


Fig. 4.9

Haemolytic anaemia (autoimmune): peripheral blood film showing erythroblasts, red cell polychromasia and spherocytosis.

Hereditary spherocytosis

no dent in middle



Hereditary elliptocytosis, stomatocytosis and acanthocytosis

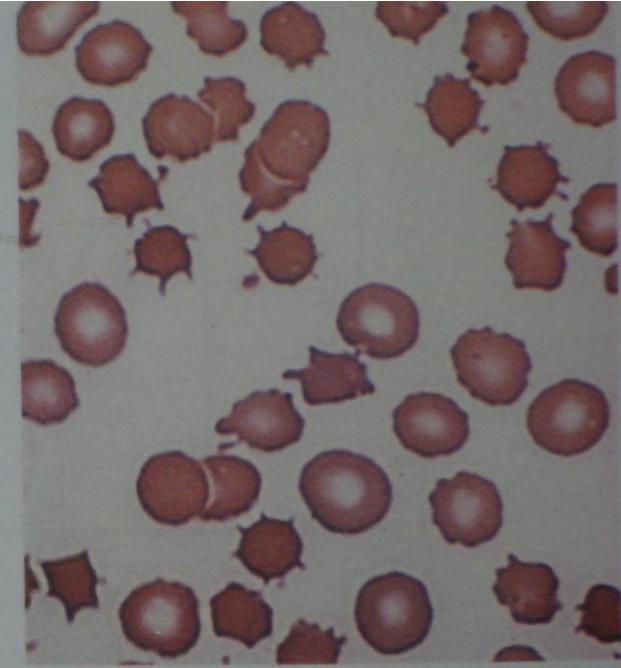
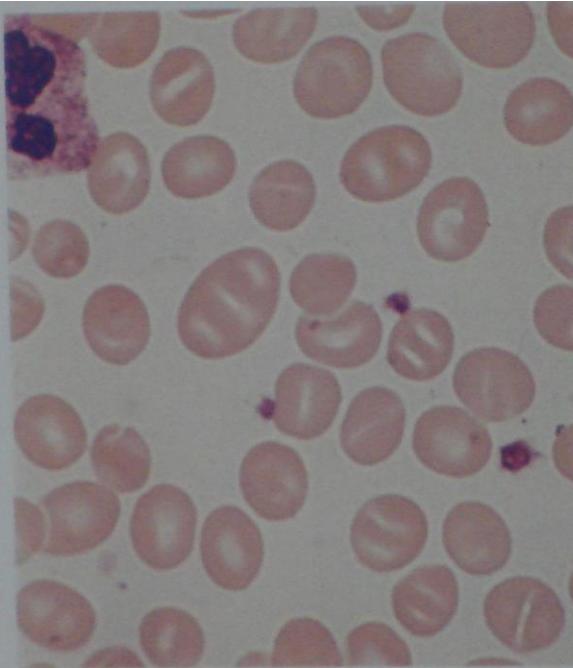
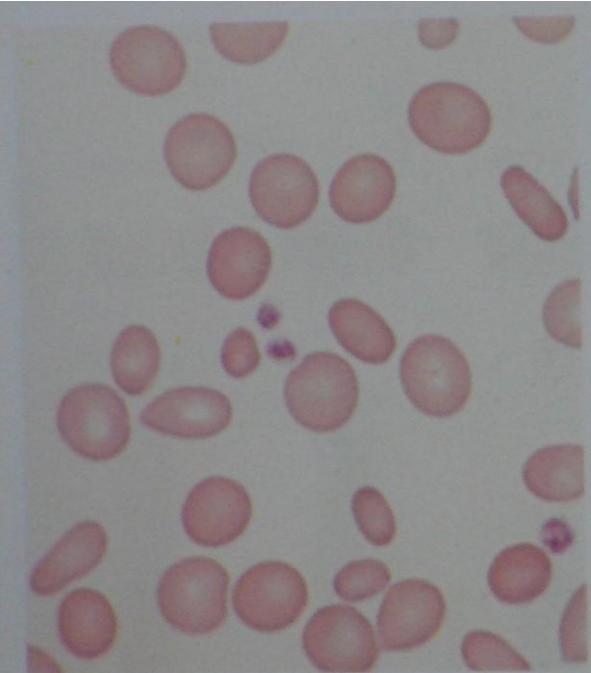
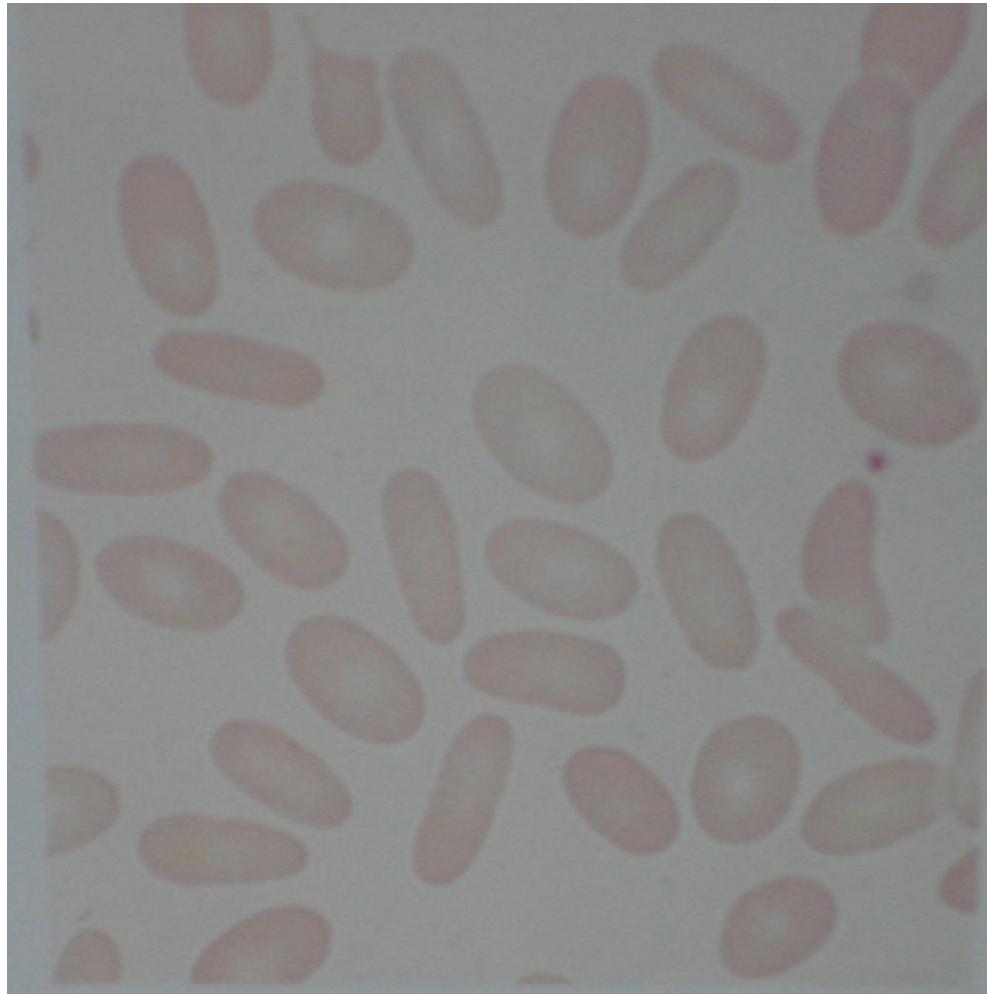


Fig. 4.24
Hereditary elliptocytosis: peripheral blood film from the child in Fig. 4.23 shows red cell anisocytosis and poikilocytosis, with elliptocytes and microspherocytes, a hereditary pyropoikilocytosis.

Fig. 4.25
Hereditary stomatocytosis: peripheral blood film showing many cells with the characteristic loosely folded appearance of the membrane. The membrane has increased passive permeability, allowing excess sodium entry.

Fig. 4.26
McLeod phenotype: peripheral blood film showing marked acanthocytosis of red cells associated with the rare McLeod blood group. There is lack of the Kell antigen precursor (Kx).

Hereditary elliptocytosis



myelofibrosis
thalassemia
ida
hereditary elliptocytes

Auto immune haemolytic anaemia

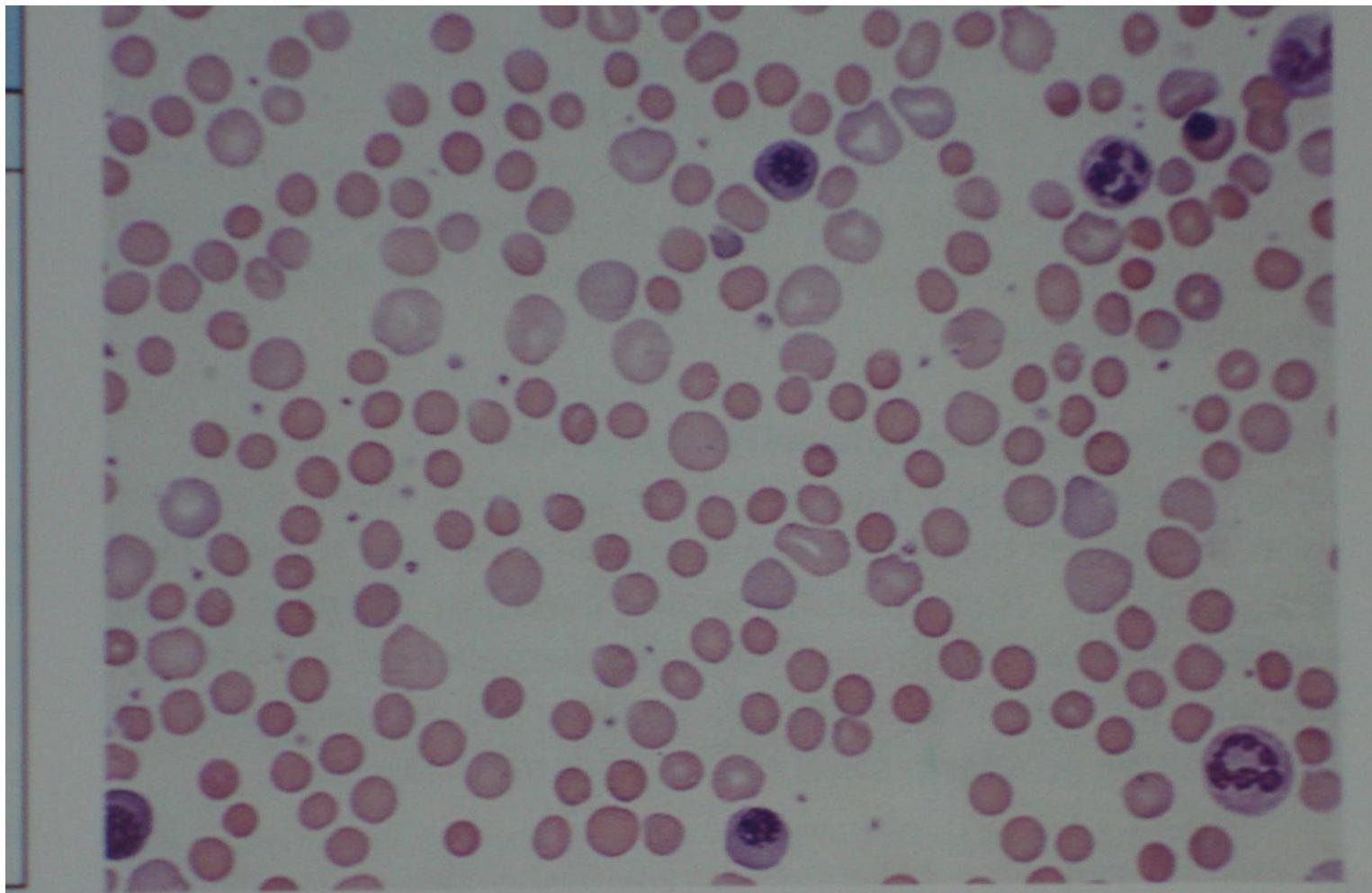


Fig. 4.39

Autoimmune haemolytic anaemia: peripheral blood film showing erythroblasts, polychromatic macrocytes and marked spherocytosis.

Beta-thalassaemia major

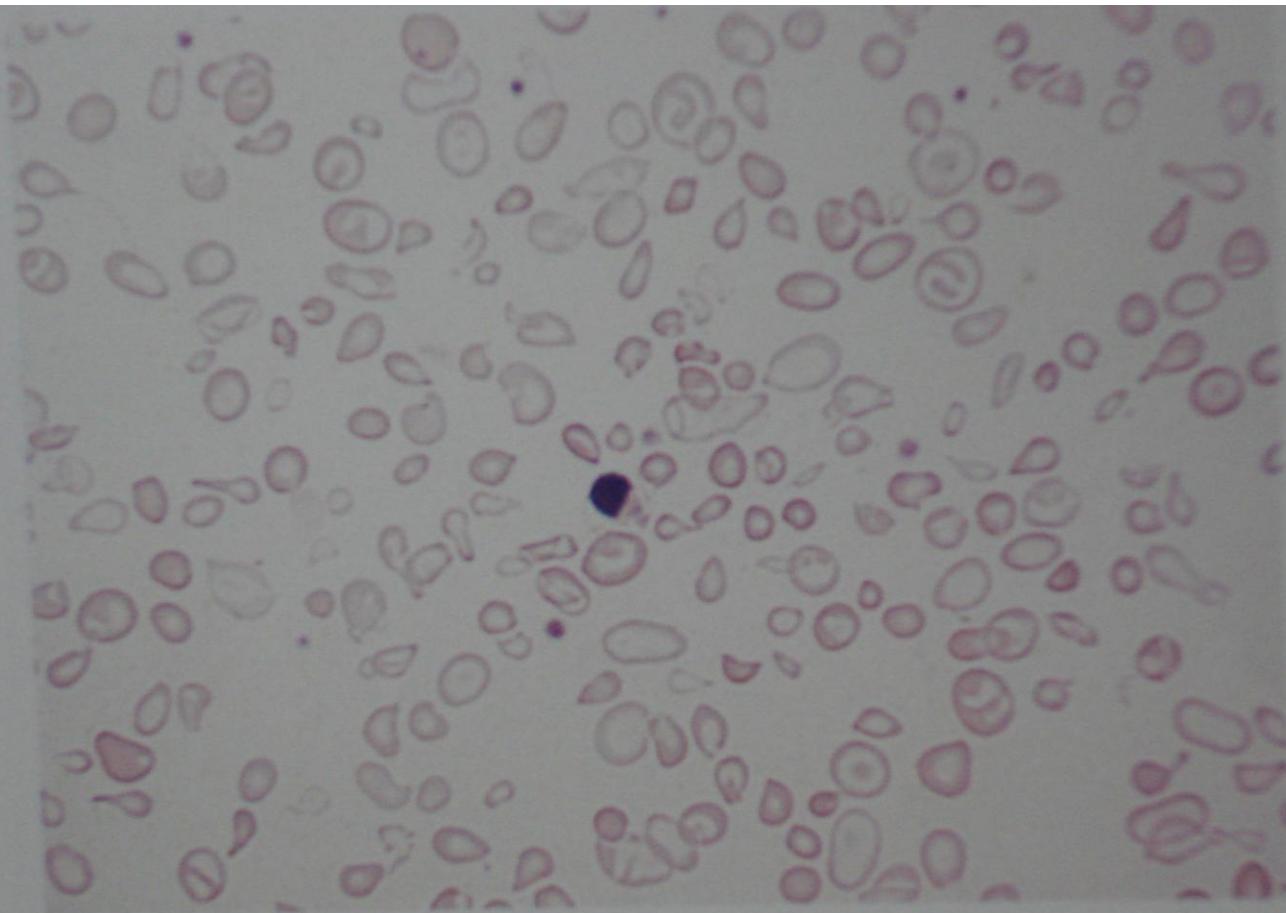


Fig. 5.13

β -Thalassaemia major: peripheral blood film showing prominent hypochromic microcytic cells, target cells and an erythroblast. Some normochromic cells are present from a previous blood transfusion.

Fig. 5.14

β -Thalassaemia hypochromic *Puppenheimer*

Target cells and acanthocytes

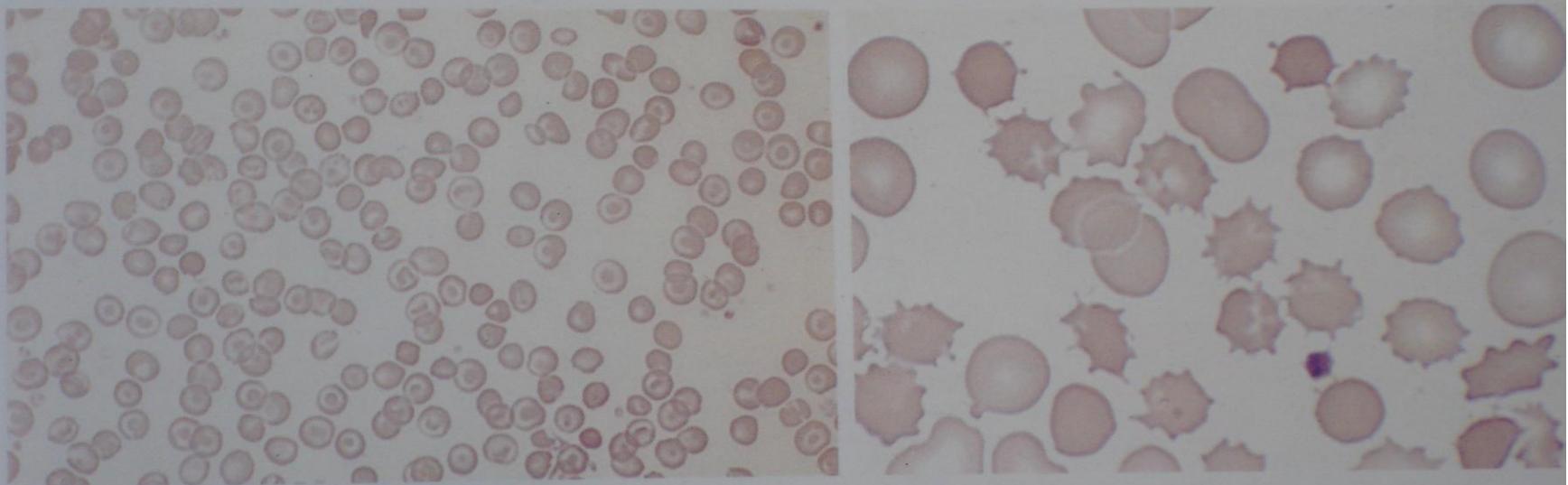


Fig. 6.34
Liver disease: peripheral blood films showing (left) marked target cell formation and (right), at higher magnification, marked red cell acanthocytosis.

LE cell

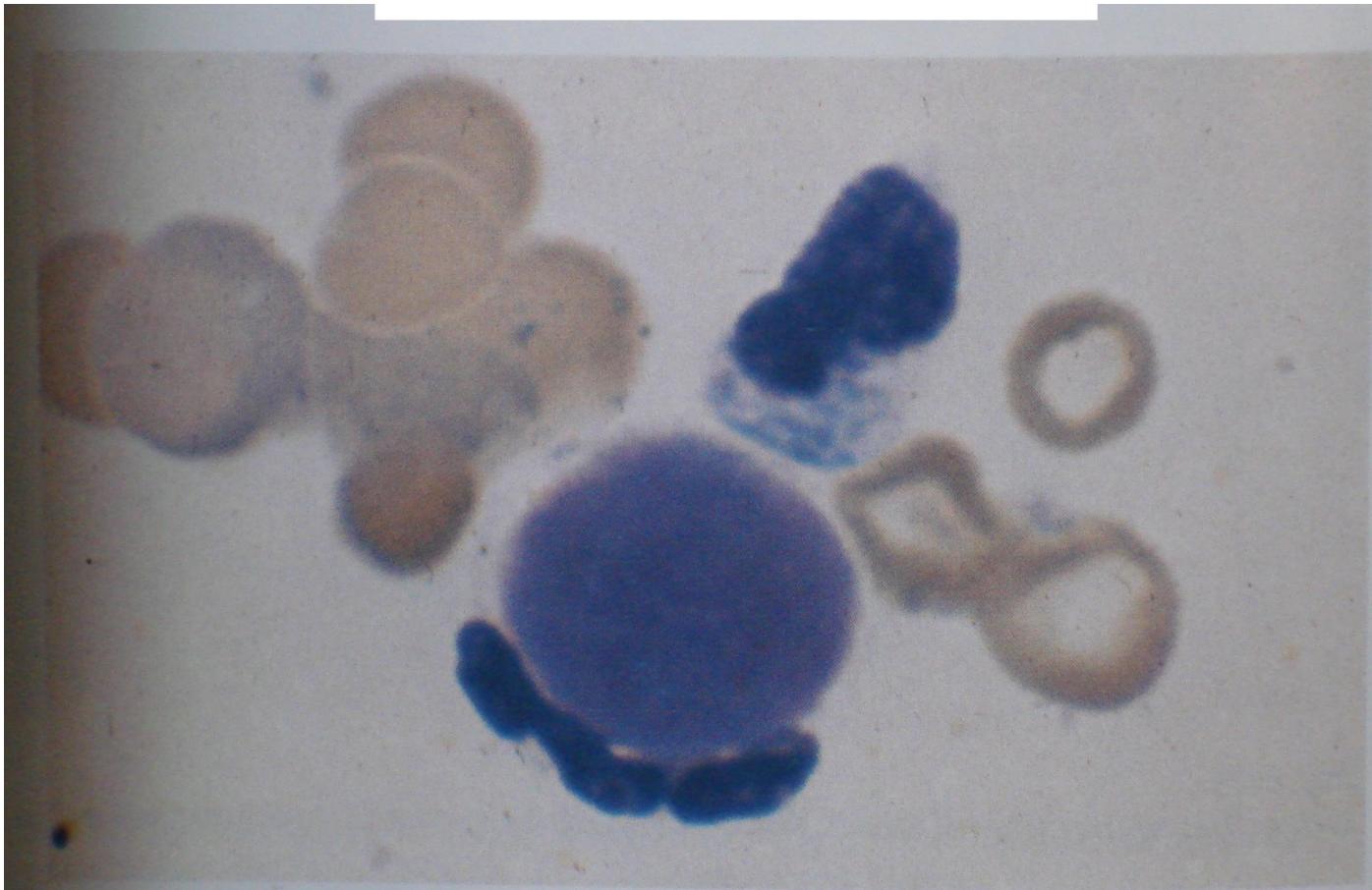
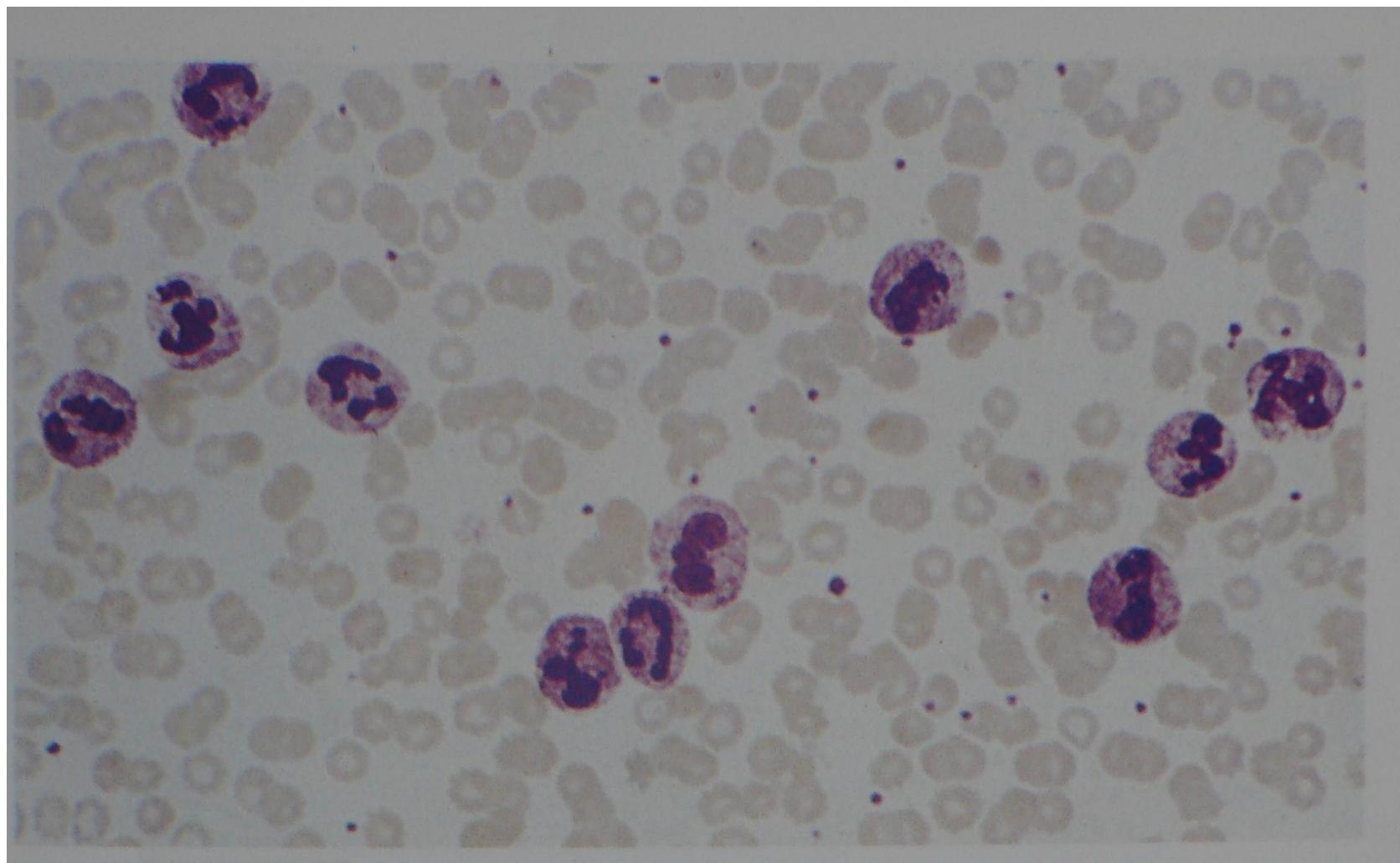


Fig. 6.38

Positive lupus erythematosus (LE) cell test: the amorphous purple-staining nucleus has been phagocytosed by a neutrophil.

Neutrophilia



Leukamoid reaction

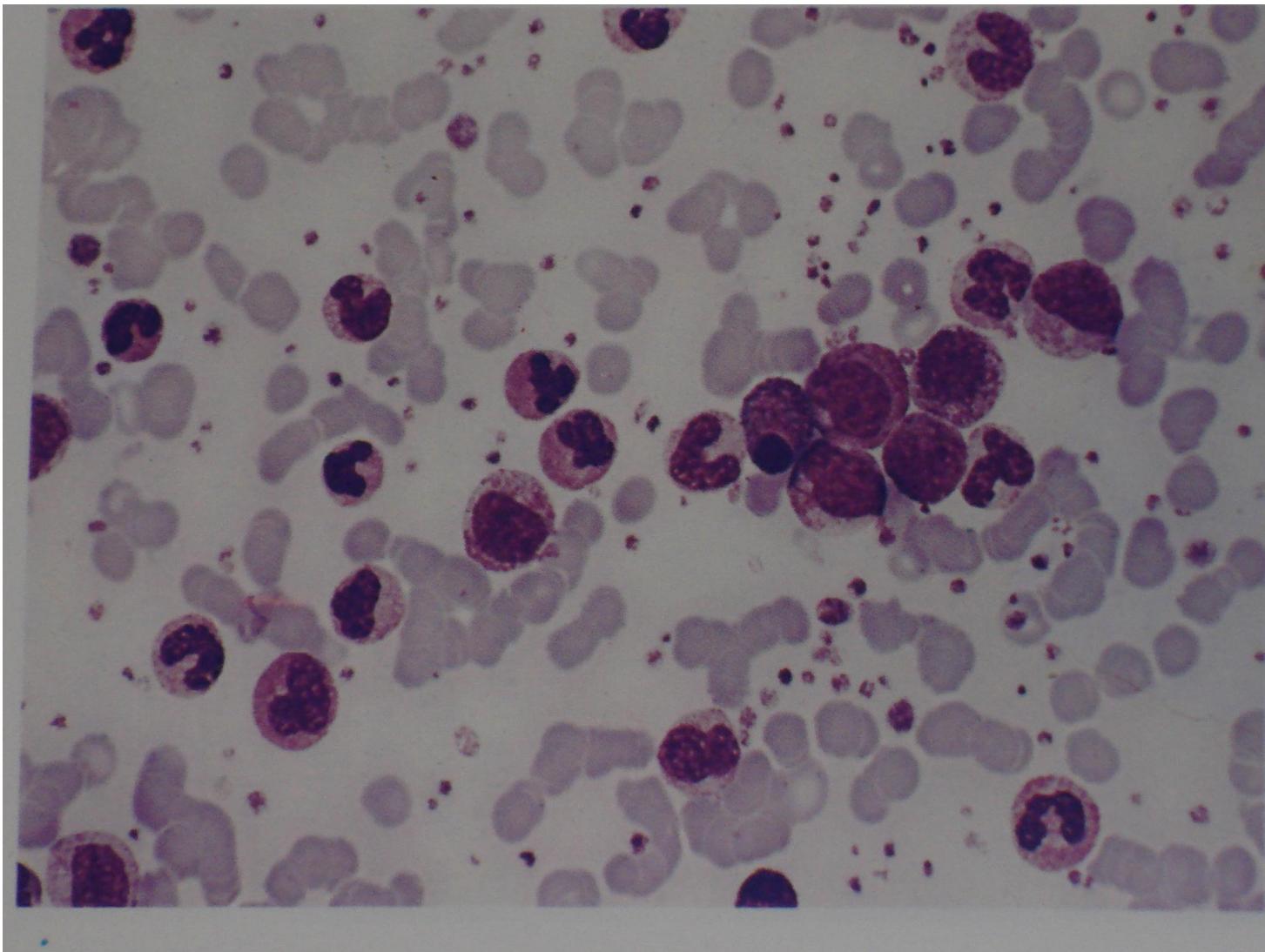
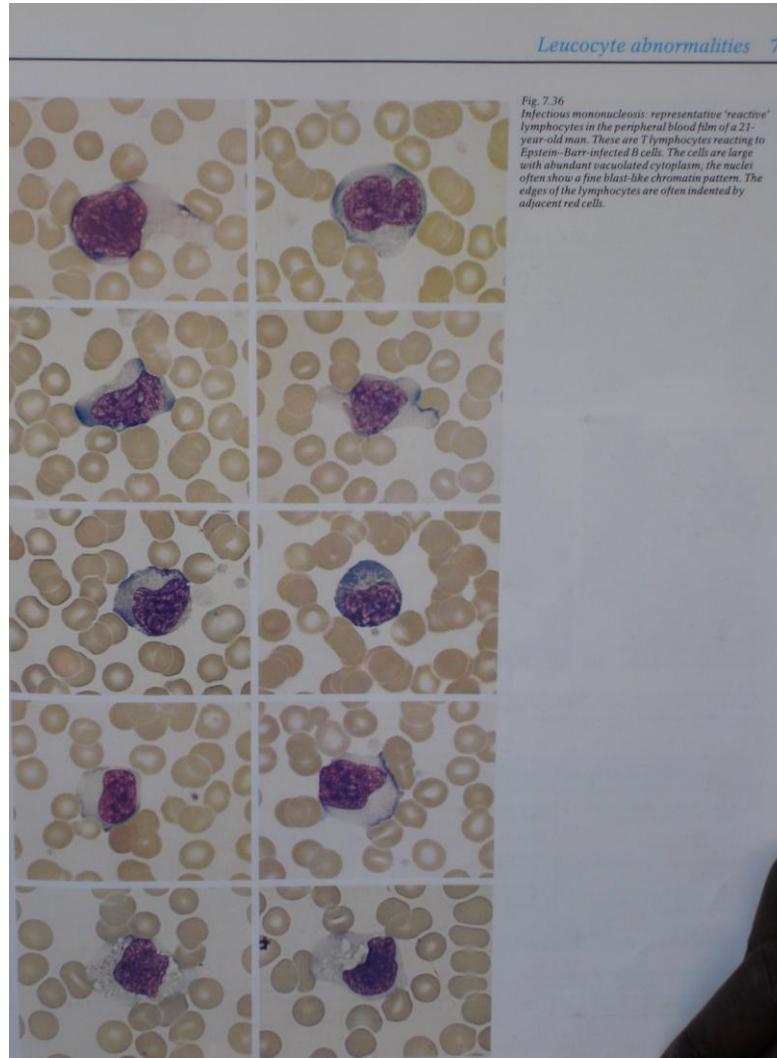


Fig. 7.18
Leukaemoid reaction: neutrophils, stab forms, metamyelocytes, myelocytes and a single necrobiotic neutrophil (centre) in staphylococcal pneumonia. WBC: $94 \times 10^9/l$.

Infectious mononucleosis



AML

Acute lymphoblastic leukaemia: testicular swelling and erythema of the left side of the scrotum due to testicular infiltration. Courtesy of Dr J.M. Chessells.

Acute lymphoblastic leukaemia: radiographs of children's skulls showing (left) a mottled appearance due to widespread leukaemic infiltration of bone and (right) multiple punched-out lesions due to leukaemic deposits. Courtesy of Dr J.M. Chessells.

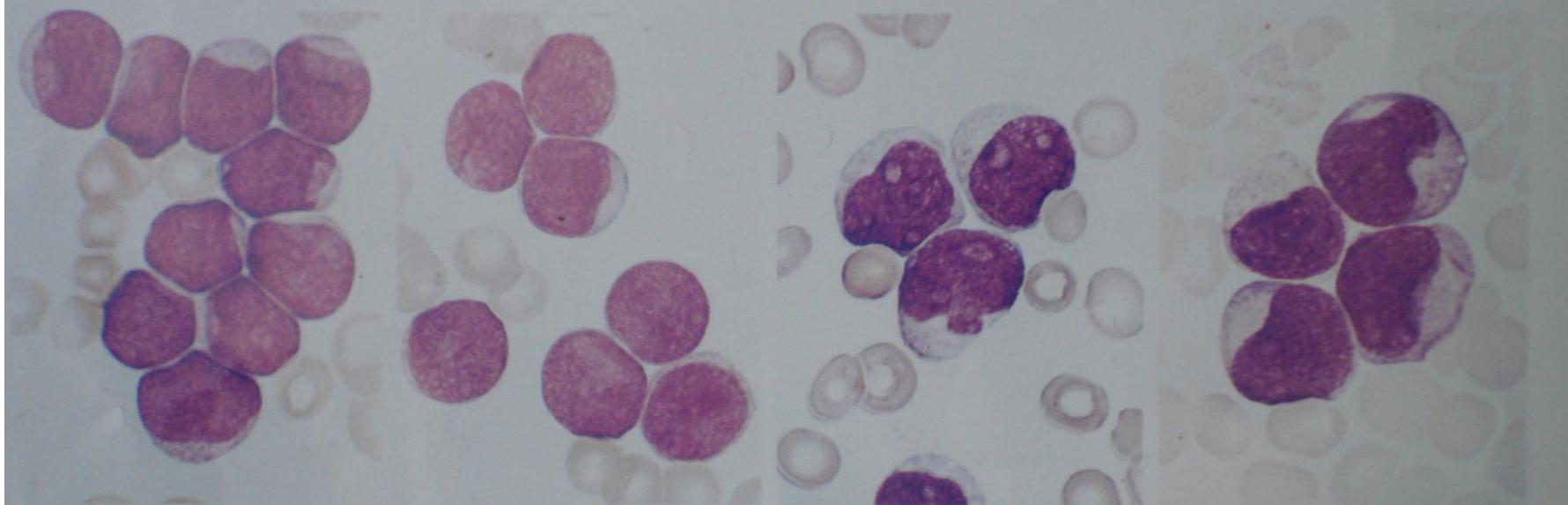


Fig. 8.22

Acute myeloblastic leukaemia, M₁ subtype: bone marrow aspirates showing blasts with large, often irregular, nuclei with one or more nucleoli, and with varying amounts of eccentrically placed cytoplasm. There is either no definite granulation or a few azurophilic granules and occasional Auer rods. At least 3% of cells stain with Sudan black or myeloperoxidase.