

(taking acid dye). These cells are the active phagocytes of the blood; the cells which pass out from the vessels in inflammatory exudations. This is the cell which is increased in the leucocytosis of some fevers *e. g.* pneumonia before the crisis.

(b) The lymphocyte or small mononuclear cell, small hyaline cell of Kanthack. This is a small cell about size of red discs, with a large nucleus nearly filling the cell, the protoplasm appearing as a faint hyaline ring about the nucleus. This cell makes up from 10 to 25% of white blood cells.

(c) The large lymphocyte, large mononuclear, or hyaline cell. This is a larger cell being about the size of polynuclear cell with a large nucleus and a large rim of hyaline protoplasm about it. It is found to make from 4 to 8% of white cells.

(d) The eosinophile cell or coarsely granular oxyphile cell of Kanthack. This is a cell as large as the polynuclear; the nucleus is single, lobed or horseshoe shaped, and as a rule takes the stain lightly. The protoplasm is filled with coarse granules, which take up acid dyes with avidity. This cell makes up from 1 to 3% of the white cells.

(e) Transitional forms. These lie between the large lymphocyte and the polynuclear cell. The nucleus is single, bean or horseshoe shaped, and the protoplasm is either hyaline or filled with small neutrophile granules.

Now, besides these cells which are found normally in the blood; we may find other forms in disease, or we will find the percentage ratio of white to red or of the various white cells, one to the other, disturbed. Now the new forms which we may find in the blood are:—

(f) The Mastzellen or Basophile cell, which appears rarely in healthy blood, more frequently in grave anaemias. This is a large cell with a single nucleus, the protoplasm being filled with granules taking on a deep staining with Basic dyes.

(g) The myelocyte—a cell which is characteristic of spleno myelogenous and mixed Leukaemias. This is a large cell commonly larger than the polynuclear cell. It has a large single nucleus rounded or oval; the protoplasm is filled with granules, which are commonly oxyphile but which (as lately shown by Buchanan) may at times be basophile or show mixed granulation. The presence of these cells is as before stated absolutely characteristic of Leukaemias.