

INTRODUCTION

In the circulating blood of man there are in health three types of cells. The leucocytes, the erythrocytes, and platelets.

The leucocytes are distinguished in unstained preparations by the presence of nuclei, by their size, and by the absence of colour.

The granulocytes have variably lobed coarse nuclei. Their cytoplasm contains numerous distinct granules and the staining reaction of these enable three types of cells to be distinguished.

In the most numerous they are neutrophilic, In the second subgroup they are eosinophilic and in the third and last numerous they are Basophilic.

The monocytes are also granulated cells but have much more finely structured nuclei and very fine granules.

The lymphocytes usually have rounded dense nuclei and their clear blue cytoplasm is free of all but the occasional azurophilic granule (Thompson, 1977).

Total and differential counts of blood leucocytes are an essential part of the diagnostic study of nearly every

sick person, and evaluation of granulocyte morphology is especially important in patients with leucocytosis or leucopenia. Also to differentiate the leucocytosis of infection from leukemoid reactions, drug, , or toxins induced granulocytopenia, and primary disorders of the marrow (Lazolo et al., 1983).

All classes of leucocytes are involved in defence against various pathogens. The neutrophil granulocytes are mainly phagocytic and bacteriologic.. The monocytes are also phagocytic and on entering the tissues, they transform into various types of macrophages.

The lymphocytes are involved in immune response and when stimulated artificially or by an appropriate antigen are capable of remarkable transformation from the resting state into an active blast-like cell. (Thompson, 1977).