

*Histology.*—The lymphocytes, small and large, belong to the one class, the difference being mainly a matter of size. In differential counting it is customary to regard every lymphocyte smaller than a red blood corpuscle, that is, from 4 to 7 m. in diameter, as small, and those above that size as large. Many have endeavored to classify these according to the staining characteristics of their protoplasm and nucleus, but we so often find small lymphocytes taking on the characteristic staining of the large mononuclear, or *vice versa*, that the classification according to size seems to be the better, as the lymphocytes so far have no individual significance, but must be studied as a class. The large mononuclear is a cell larger than the large lymphocyte, that is, 12 to 20 m. in diameter, with a large, round nucleus, generally excentrically placed, and surrounded by a protoplasm, usually containing a few basophile granulations.

The next variety is the polynuclear, with its horseshoe-shaped nucleus and a cell body filled with fine neutrophile granules, which granules form an integral part of the protoplasm (Arnold).

The eosinophile possesses a like morphology to the polynuclear leucocyte, but its protoplasm contains a coarse granule, which is acid in reaction. The mast cells have a round or polynuclear faintly-staining nucleus, which is surrounded by coarse purple granules. In speaking of the histology of the white blood corpuscle, I wish to speak of two other cells, the myelocyte and the eosinophile myelocyte. These cells are found in severe or prolonged leucocytosis, and represent the bone marrow precursors of the polynuclear and eosinophile respectively.

*Origin.*—Just a word as to origin. The white blood corpuscles are derived from the lymphatic glands, bone marrow, spleen, and possibly from certain tissue centres. The original view that all white corpuscles came from one cell, namely, the large lymphocyte, and that each particular cell represented different stages of development, has been largely replaced by the view of Erlich that the lymphocytes are derivatives of the lymphatic glands, while the remaining forms, the mononuclear, transitional, polynuclear, eosinophile and mast cell come from the bone marrow; the polynuclear and eosinophile from its precursors in the marrow, the myelocyte and eosinophile myelocyte.

Recent researches by Kanthack and Hardy have attempted to show that the large mononuclear or hyaline cells, as he called them, together with the eosinophile, were not of hemal origin, but had their origin in local tissue cells. This point is worthy of note when one considers the large number of eosinophiles