

Dominion Medical Monthly

And Ontario Medical Journal

Vol. XXXIX.

TORONTO, SEPTEMBER, 1912.

No. 3

Original Articles

ON THE MONONUCLEAR CELLS OF THE BLOOD

By O. C. GRUNER, M.D., MONTREAL.

Pathologist, Royal Victoria Hospital.

Enumeration of the white cells of the blood by recording the different varieties as they pass before the observer's eye in a microscopic preparation is a well-recognized procedure in clinical microscopy. The classification usually adopted is, in its main features, that originally put forward by Ehrlich in 1891, although Arneth's¹ work was published in 1904, in which an attempt was made to demonstrate the utility of subdividing the white cells into further groups than those referred to. That this new classification has been adopted in so few centres appears to be due to the increased attention which is needed in carrying out a given differential count. Experience has nevertheless demonstrated the utility of the system in deciding on the reactive powers of a patient's tissues to different infections. Just as the great majority of cases reported in the present-day literature, in which a differential blood count has been made, give the reader extremely little information about the polymorphonuclear cells, so it is a conspicuous fact that a distinction between "small lymphocytes," "large lymphocytes" and "hyaline" cells appears to be considered a satisfactory limit in the case of the mononuclear cells. It is the main object of the present paper to show that this limitation should not be accepted as final.

Some years ago the writer endeavored to divide up the lymphocyte forms into several varieties, according to morphological characters, with the object of ascertaining if any rules lay at the root of the distribution of the different cells in the blood stream, from