

noid coagulable at the temperature at which ordinary serum albumen coagulates; Rovida's hyaline substance; and a fifth albuminoid, the reactions of which need not be described here. Miescher was unable to detect paralbumen, though he does not deny its presence. The alcoholic extract of the globules was only investigated for lecithin and cerebrin, both of which were found to be present, the former in abundance. No gluten or chondrin was found in the watery extract, nor in the serum of pus.

It must be understood that a mixture of lecithin and cerebrin forms the substance to which Liebreich assigned the name "protagon," a highly phosphorized material, for lecithin leaves, on incineration, produce an ash very rich in phosphoric acid. But Miescher has also demonstrated the presence of another phosphorized substance in the nuclei of pus corpuscles, to which he has assigned the name *nuclein*; and he surmises that this body, on account of its phosphorous, plays an important part in cell-growth and in the genesis of the cell albuminoids and their derivatives. Nuclein closely resembles mucin, but is richer in phosphorous, and it appears to exist performed in the corpuscles.

With reference to the questions of the origin of pus corpuscles, their identity with the white blood globules and lymph corpuscles, and their ultimate fate, Hoppe-Seyler's results are remarkably interesting. Since living white blood corpuscles cannot be obtained from the blood in quantity sufficient for chemical analysis, and the spleen, although furnishing them abundantly, contains cerebrin and glycogen (both of which it is necessary to exclude), a novel expedient was adopted. Fresh crystalline lenses from the ox were introduced into the abdominal cavity of dogs, and, as was expected, the lenses became infiltrated with lymph corpuscles. The presence of glycogen was proved most clearly in the lenses at the period corresponding to the greatest number of active lymph cells; hence the conclusion that the glycogen comes from these. If, however, the lenses were allowed to stand still the corpuscles became rigid, sugar was found, but no glycogen. Since no glycogen was detected in the pus from inflammatory abscesses and wounds, its occurrence is a means of distinguishing lymph cells from pus corpuscles, although these have their origin in the former.