

definite transformations; and the plastic constituents undergo one of the described metamorphoses within and external to the vessels. This process alone I designate by the name of inflammation.

Stasis of the blood-corpuscles and consequent metamorphoses of the blood, with or without exudation of proteins, are the only anatomical characteristics of inflammation. After stasis has occurred, the latter may disappear, and the plastic material continue to exude, as is the case in chronic suppuration. The name inflammation, however, should not be given up; because the other exudations above-mentioned occur in the vascular system, and are entirely different from those of the inflammatory process, in the fact that they occur without stasis and alteration of the blood-corpuscles; and the word hyperæmia, or stasis, and even exudation alone, define inflammation as little as the earlier words tumefaction, heat, redness, and pain, used for all its forms.

From the preceding it is clear that, in disease the plastic substance is deposited in two modes; without previous stasis of the blood, as in normal nutrition, and with stasis of the blood corpuscles, probably through their agency, as in inflammation. The first process we understand very imperfectly, because we are unacquainted with the laws of ordinary nutrition. We know isolated conditions, in which, for example, fat or serum is deposited in certain tissues, but the numerous explanations which have been given of diabetes are sufficient to exhibit the paucity of our knowledge in this respect. With the mode of deposition of plastic matter in inflammation, we have a rather more exact acquaintance, and shall treat of it particularly.

Inflammation consists of several consecutive groups of phenomena or stages, each of which may terminate without necessarily passing into the next, and each, according to its nature, requires a varied method of treatment already discovered unconsciously and empirically. These groups of phenomena or stages are as follow: congestion, hyperæmia, stasis, exudation, and gangrene.

12. *Congestion.*

This stage sometimes precedes the others, but not necessarily.

By the term we designate an unusual flow of blood through a certain portion of the capillary system in a given time, and the condition may be directly observed by means of the microscope. An acceleration of the entire capillary circulation may occur as well as partially in an organ or