

cases of great importance; in the other he will be considered unskillful and far inferior to practitioners who find no such difficulties. But if he yields to these influences and allows a suspected case to come in contact with healthy children, he will expose himself to severe and just censure.

A point which may be properly considered with the diagnosis, and one which does not appear to have received the attention which it deserves, is this: Does one attack of diphtheria afford any protection against subsequent attacks, as is the case with nearly all infectious diseases? If this were not so, would it not frequently happen that families once attacked by diphtheria, and continuing to live under exactly the same conditions, would have the disease almost constantly with them, and would not children living in unhealthy dwellings be liable to a second or third attack at varying intervals when there had been no cleaning or disinfection of the dwellings after the disease had once occurred. It must not be forgotten that second or even third attacks do occur, though rarely in small-pox, scarlet fever and measles.

Selected Articles.

A CONTRIBUTION TO THE SUBJECT OF ACUTE PLEURISY: ITS PATHOLOGY, ETIOLOGY, SYMPTOMATOLOGY AND TREATMENT.

The proper classification of an inflammatory affection of a serous membrane, and especially of the pleura, is not an easy task. The terms "acute," "subacute," and "chronic," that have been applied to diseases of that nature, are often subjects of much criticism, no matter what pathologic lesions or symptomatic indications they may be derived from.

In considering acute pleurisy, I shall not hope to unravel these disputed questions, and only trust that I shall not fall into the common error of making them more intricate.

The term "acute" pleurisy indicates an inflammatory condition, more or less general in extent, of the serous membrane lining the pleural cavity, with sero-fibrinous or purulent deposits, primary or secondary in nature, of microbic or other origin, with a certain degree of sharpness of attack, and in which the height of the disease is attained in a few days, ten at the most, and accompanied by a rise in temperature of greater or less extent. Acute pleurisy may thus be (1) dependent on pre-exist-

ing disease or lesions, the development of which may cause sudden intense inflammatory conditions of the pleura, more or less extensive; or (2), it may be an idiopathic disease.

Pathology.—Hyperæmia, or congestion of the blood-vessels within the serous and subserous connective tissue, causing swelling, redness, and edema of the pleura, is the first noticeable lesion of acute idiopathic pleurisy. This congestion may take place in some localized spot and rapidly extend to a greater or less degree; or it may, from the first, present quite a general appearance over the surface of the pleura. Soon the smaller and weaker capillary vessels rupture, producing ecchymotic spots over the membrane, and, at the same time, infiltration of the subserous connective tissue occurs, with a proliferation and detachment of epithelial cells. As the process progresses the pleura is studded with fine granulations upon its surface, in which appear embryonic cells. These tend to organize the newly-formed connective tissue into firm fibrinous bands, which, in old cases, are often found stretching across the pleural cavity, and constitute the so-called neo-membranes. Finally, from the congested serous membrane is poured into the cavity a liquid resembling in all respects the plasma of the blood, except that it is more dilute; the degree of dilution, however, varies with the intensity of the congestion, according to the coagulability of the fibrin in the effused fluid. There are, also, red blood-corpuscles and leukocytes in the liquid; but in simple sero-fibrinous pleurisy the red globules are not in sufficient numbers to cause any marked discoloration; if such occur, the pleurisy is termed "hæmorrhagic."

"Inflammation," says M. Germain Séé, "is a struggle for life, and not a destructive process; it is essentially a vital phenomenon eminently reactionary against a morbid agent." He believes that the teachings of microbiology show that inflammation is a physiologic process strongly exaggerated; a general struggle of the organism against microbic invaders. "The first step in this process," he says, "is leukocytosis, or the exaggerated production of white corpuscles in the blood; and the second is the absorption and destruction of micro organisms by these leukocytes, showing the defensive action of the latter; this is called "phagocytosis."

Certain physiologic functions are attributed to the phagocytes:

1. They carry from the albuminates in the intestinal canal material for combustion in the tissues.

2. Owing to their ameboid movements they are capable of transporting to distant parts of the body substances in their vicinity.

3. They possess, under certain conditions, a reproductive function, and a power of collecting themselves in vast quantities in certain localities.