

abdomen and stitched the sac to the edges of the wound, then opened the sac and removed 12 qts. of yellowish, milky-looking fluid, and then the foetus, which had become attached in several places to the side of the sac, bands having been thrown around the legs and arm, one so strong that I had to remove the arm at the shoulder and carefully dissect off the adhesion. The placenta I found detached and lying loose in the bottom of the cavity. I washed out the sac with warm water until nothing was left. My patient had ceased to breathe, but the hot water quickly dashed into the sac revived her, and by the continued efforts of my assistant she rallied. Drainage tubes were left in the wound, and the sac was daily washed. No bad symptoms followed, and she made a rapid recovery. Is now a strong, fat and healthy woman.

DR. ALLOWAY thought the history of the case a little short, he did not catch how long the foetus was in the abdominal cavity proper. He congratulated Dr. McGannon on the result of the case.

DR. MCGANNON said that the history was very definite, and he thought that there could be no question about the length of time, which was within a few days of thirteen months.

Progress of Science.

THE NATURE OF INFLAMMATIONS IN THE LIGHT OF RECENT DISCOVERIES.

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So much of the mystery connected with this subject has been cleared away by the investigation of recent observers, that we are now in a position to drop much of the old mysterious technology in regard to inflammation, and to explain its varieties and phenomena as clearly and rationally as we can explain any biological process.

Before beginning to discuss the subject in a connected manner, I will make the following propositions, which I consider either as axioms or as propositions proved, and acknowledged as proved, by the majority of the profession.

1st. All inflammations are, strictly speaking, local, as we know of no disease in which all the tissues of the body are inflamed. Even if specific fevers be regarded as inflammation, or fermentation, of the blood, having in addition in many instances lesions of solid organs or tissues, we must remember that the blood is only one of the many tissues of the body, a

hæmatitis is as much a local affection as peritonitis.

2nd. The effects of local inflammations may become general in at least three ways: First, by the action upon the nervous system of septic poisons absorbed into the blood. Secondly, by direct injury or irritation to the nerves in the inflamed area, causing shock, pain, loss of sleep, and reflex disturbances of the general nervous system. Thirdly, through the drain of suppuration.

3rd. Every cell in the body is directly or indirectly under control, more or less complete, of the nervous system. This includes the blood cells, which are controlled indirectly by the vaso-motor nerves.

4th. The following phenomena of acute inflammation have been actually observed—viz., a dilatation of the capillaries of the part, a slowing of the current, accumulation of leucocytes around the periphery of the vessels, complete occlusion of the vessels in places by the leucocytes, stasis, clearing of the lumen of the vessels by the passage into the tissues of these aggregated cells, escape of plasma into the tissues, transformation of escaped cells into connective-tissue cells, and, in septic inflammations, the presence of bacteria in the interior of escaped white blood-cells, sometimes showing evidence of degeneration or digestion by the cell.

5th. The escape of leucocytes from the blood-vessels and their transformation into connective tissue also take place normally and in normal tissues.

6th. The escape of plasma also takes place normally for the purpose of bathing and nourishing the cells of the body, and is returned to the blood-vessels by means of the lymphatic circulation.

7th. The plasma that escapes in inflammation serves as a culture medium for the escaped round cells, and exerts a germicidal action upon bacteria.

8th. This escape of blood elements, which is the essential feature of inflammation, is therefore only an exaggeration of a normal process.

9th. Aseptic inflammation can be caused only by destruction or irritation of tissue by mechanical or chemical means, or by heat, cold or electricity, under conditions that prevent the access of bacteria. But any aseptic inflammation may quickly become septic by access of germs to the tissues.

10th. Aseptic inflammation is only a process of repair, and consists essentially of a replacing of destroyed tissue by connective tissue formed from the colorless blood-cells. Aseptic inflammation of a low degree may be indefinitely prolonged by the circulation in the blood of some toxic substance, purely chemical, which continues by its presence to irritate or destroy tissue. Otherwise, aseptic inflammations either