

Periscope.

PATHOLOGY.

248. BEMERKUNGEN UEBER DAS VERHALTEN GEWISSE ORGANE GEGENUEBER SPECIFISCHER INFECTIONEN (Observations Concerning the Relation Between Certain Organs and Specific Infections). v. Babes (Berl. klin. Woch., No. 17, 1899).

This paper is a continuation of some work published in 1889. In that paper the author enunciated the fact that normal nerve substance injected into animals with hydrophobia counteracted the effects of that infection. In a later paper he showed that the gall of a rabid dog mixed with the virus of hydrophobia prevented the development of rabies in an infected dog. He concludes from this that in the incubation stage of the disease a substance which normally exists in the nervous system is eliminated from the system through the gall. In a long series of experiments on dogs and rabbits he found in the incubation stage of the disease, when no symptoms, or only slight fever, were present, well-defined changes in the nervous system. These consisted of proliferative changes in the walls of the vessels and chromatolysis of the ganglion cells of the cord and bulb. These changes were first noted around the central canal. The poison, therefore, penetrates the cord from the central canal, producing edema, leucocytosis, irritation of connective tissue, and degeneration of the nerve cells. The poison is distributed along the nerves, and affects the motor centers. The nerve cells attempt to paralyze the effects of the poison by the elimination of their chromatic substance, and so long as sufficient cells remain which do not show this change, symptoms do not develop and the disease does not advance beyond the incubation stage. The liver, therefore, reacts differently, depending on the character of the infection. It may act as a filter, and thus separate the micro-organisms, or it may secrete some material which has a bactericidal action. This substance may pass into the blood and protect it from infection, as in typhoid. Finally, the liver can assist, through the gall, in the elimination of the neutralized virus.

McCARTHY.

249. UEBER VERÄNDERUNGEN DER NERVEN BEI ACUTER STÖRUNG DER BLUTZUFUHR (Concerning Changes in the Nerves Caused by Acute Disturbance of the Circulation). M. Lapinsky (Deutsche Zeitschrift für Nervenheilkunde, Vol. 15, Nos. 5 and 6, p. 364).

A number of cases have shown that when an artery is suddenly closed, symptoms of nerve involvement rapidly develop. Lapinsky reports six cases of this character, and proposes the name of neuritis ischæmica for this form of nerve degeneration. From a study of his cases and of others in the literature he thinks:

Ischemia of the extremities lasting a few days can cause disease of the peripheral nerves.

Motor function is impaired, and soon entirely abolished.

Sensation (for touch, pain, location, heat, and cold) is impaired and soon lost.

Skin and tendon reflexes are soon weakened, and then lost.

Electrical irritability of the nerves to the faradic and galvanic currents gradually diminishes, and is soon entirely lost.