

ence, is extremely minute and quite transparent, and possessing the power of rendering their heads extremely sharp, they pass through the tissues without leaving any visible traces of their migration. Their course seems somewhat arrested by the tendinous insertion of muscles, at which part they may usually be found most abundantly. Trichinae which have not yet become encysted can only be recognized by means of a magnifying power of fifty. The deposit of chalk about the cysts generally requires months for completion, and gives the flesh the appearance and sensation as if containing sand, and grates on cutting through them with a knife.

The American Medical Times tells of a case in which the trichinae were yet alive after ten years' torpor. Even when there are but few to be found they exist widely scattered throughout the whole of muscular tissue of the body, excepting, perhaps, that of the heart.

Since their discovery, in 1835, the trichinae have frequently been noticed in different parts of the world. It was, however, only in 1860 that more minute investigations concerning their nature and development, were made by Professors Virchow, Leuckart, Zenker, and others. Zenker was the first to recognize these parasites as being the cause of illness and death, before which time they were considered more as a curiosity than a source of danger.

In the spring of 1862, about thirty cases of trichina disease occurred in Plauen in Saxony. Small pieces of muscular tissue were excised from some of the patients and examined by means of the microscope, and thus, for the first time, the diagnosis of trichinosis was made in the living subject. Since then numerous cases of it have been observed in different parts of Germany, and no doubt many have occurred elsewhere which have not been recognized by medical men.

The disease produced by these parasites may be divided into three stages.

The first, including the period from the arrival of the trichinae into the stomach, until the birth of the first of the progeny, is merely accompanied by loss of appetite and general malaise, and lasts usually from four to eight days.

The second and most important stage, comprising the morbid symptoms produced by the migration of the young from the bowels to their permanent abode in the muscular tissue, sets in with rigors, heat, quick pulse, loss of appetite, pain in the abdomen, either profuse diarrhoea or what is more frequent obstinate constipation, general prostration, and in severe cases, fever of a typhoid character sometimes accompanied by delirium. Among the many other symptoms may be enumerated dyspnoea, hoarseness, and oedema of the face, from trichinous invasion of the muscles of the chest, larynx and face; the swelling in the extremities follows a later period and closely resembles that of rheumatic fever, with this difference that the joints never suffer from these parasites. The fever soon becomes more asthenic in type, profuse perspiration sets in, miliary vesicles appear on the surface, the mind wanders, meteorism, diarrhoea, hæmoptoe, lobular pneumonia, effusions in the pleura, &c. take place, and death soon closes the scene. The average duration of the second stage is from three to six weeks, although fatal issue may take place much sooner and has been known as

early as five days after the attack. Pregnant women generally abort during this period.

The third stage, or chronic trichinosis, commences as soon as the parasites have taken up their permanent abode in the substance of the muscles, which remain weak and stiff for months. In a few cases, baldness of the head, desquamation of the skin, and painful boils have been observed to follow.

Dr. Althaus expresses the opinion that many practitioners in Great Britain and elsewhere may recollect cases of this kind, which have, at one time or another, fallen under their notice, and which, in the absence of sufficient information on the subject, have most likely been set down as forms of typhoid fever.

Treatment.—Emetics and purges prove useful when given very early. For the muscular pains, warm anodyne fomentations may be employed. When the fever is very severe mineral acids and digitalis are the best remedies, and care must be taken regularly to empty the bowels and bladder. Fomentations of vinegar may be employed for the profuse perspiration and miliary vesicles; and diuretics for the oedema, as the kidneys never suffer in such cases. The vital powers must be constantly sustained and stimuli liberally prescribed when necessary. Finally the patient should never be informed of the nature of his complaint. W. E. B.

RED BLOOD IN THE VEINS.—Dr. Brown-Séquard arrives at the following conclusions regarding the colour of venous blood. 1. The blood is of a less deep color in the veins of limbs paralysed by section of their nerves or by destruction of a part of the spinal cord, than in the veins of sound limbs. 2. The diminished depth of color in the veins of paralysed limbs is due, at least in part, to the state of inaction of the muscles. 3. Paralysis of the blood-vessels may also produce a reddish color in the venous blood. 4. It is especially through their influence in exciting muscular contraction, that the nerves and galvanism increase the intensity of the dark color in venous blood.—*Br. Med. Jour.*

PARALYSIS OF THE FACIAL.—Hypodermic injections of strychnia have been successfully employed by a French surgeon for the removal of this form of paralysis. He employs a solution of one grain to a drachm and a-half of water, and injects from 8 to 16 minims along the course of the facial between its point of exit and the neck of the inferior maxilla, repeating it every second or third day. He increases the strength of the solution up to 1 in 70 if required; and finds in favorable cases the faculty of movement to become permanently restored in from ten days to a fortnight.—*Cincinnati Lancet and Obs.*

THYROIDEAN LARYNGOTOMY.—Professor Bœckel, of Strasburg, relates a case of thyroidean laryngotomy which he lately performed in order to remove a number of polypoid vegetations situated behind the glottis, and threatening death from suffocation, in a young girl. He turned back the pieces of the thyroid cartilages like opening a book, and in this way readily reached the morbid growths. The wound was afterwards cauterized with nitrate of mercury. The tissues slowly healed, and the patient sent back to the country perfectly cured of the fits of suffocation to which she had been previously subject. The ultimate result was not ascertained, as she afterwards died of a disease of which M. Bœckel could get no