

irregular, shallow, and frequent. Reflex movements could be aroused in all parts, though less actively than normal.

There was no suspicion of the patient being an epileptic, and the breath was entirely free from alcoholic odour.

The patient was strapped down in bed, ice-water applied to his head, a large blister put on at back of his neck, and a turpentine enema administered.

At 9 P. M., the unconsciousness and spasmodic movements continuing, although his cries were much less frequent, he was bled to about f̄xxxij from the right arm—the cloths wrung out in ice-water were kept up through the night.

The blood, which was drawn quickly, formed a large clot, quite firm, without marked buffy coat.

The following morning the symptoms had changed considerably; there were still spasmodic movements of the extremities, with carpo-pedal contractions, and the *risus sardonius* persisted; but the face was livid, the pupils dilated and insensible, the left eyeball rolled inwards and upwards, the extremities cold, and reflex movements very feeble. The pulse was weak and frequent, though not small, and the respirations frequent and laboured. Urine voided involuntarily.

No further treatment was adopted, deglutition being impossible and the rectum no longer being retentive. The symptoms remained much the same through the day, and death occurred at 9 P. M., about fifty-two hours from reception of the injury, and but fourteen hours from development of the first symptom of cerebral lesion.

*Post-mortem twelve hours after death.*—Head alone examined. There was no wound externally communicating with fracture of nasal bones, but upon dissecting off the soft parts the fracture was found to involve all the small bones of the nose, the nasal border of the superior maxillary bone on either side, the upper turbinated bones, and the vomer—the comminution of these latter bones extending up to the cribriform plate of the ethmoid bone. Upon removing the calvaria, the dura mater and external layer of arachnoid were intensely congested; the inner layer of arachnoid was opaque, and over the entire convexity of the brain was spread a layer of thick creamy pus, occupying the subarachnoid space. This was especially marked over anterior and middle lobes of brain, but extended round the fissure of Sylvius on each side (but more so on the left), and reached posteriorly over the posterior lobes, and, to a much less extent, over posterior surface of cerebellum and medulla oblongata. There were about f̄zj turbid serum effused around base. The ventricles did not contain any abnormal amount of fluid.

*Dec. 27. Abscess of the Spleen.*—Dr. GEORGE PEPPER exhibited the specimen, and stated that the case had occurred in the practice of Drs. Fricke and Levick, who kindly allowed it to be presented to the Society.

The patient was a German of about 45 years of age, stout and well formed, and in the enjoyment of excellent health until his last illness; he was accustomed to consume a considerable quantity of lager beer daily, but was not of intemperate habits. About two months previous to his death he visited the country, but was soon obliged to return to his home on account of a general feeling of malaise accompanied with more or less constant chilliness. He then experienced for the first time a severe pain, of apparently rheumatic character, in the right knee, accompanied by considerable heat and swelling of that joint. For this he was treated by his wife with

some purgative nostrum during thirteen days, being violently purged and puked by the remedy. At this stage of the disease Dr. Fricke first saw him; there was still considerable pain in the joint, but the swelling and redness had disappeared. He was put upon the use of the iodide of potassium and morphia, and as he was much prostrated, stimuli and a nutritious diet. Under this treatment the pain disappeared, but the case became complicated by the appearance of decided chills, quotidian in type; although no miasmatic origin could be detected, sulphate of quinia was ordered in antiperiodic doses, combined with opium and blue mass. This had no controlling effect whatever. His condition becoming more and more dangerous, Dr. Levick was called in. The patient presented no lesion, so far as could be determined, of the respiratory, circulatory, or digestive systems; the limits of the liver, as marked out by percussion, were rather increased; the patient complained of a dull pain felt in the left hypochondrium, but percussion revealed no increase in the bulk of the spleen; he could lie at pleasure on either side, and pressure seemed to aggravate it but very slightly. The chills assumed the double quotidian type, and the quinia was increased to gr. xx, xxx, and xl on three successive days, combined with tinct. ferri chlor.; stimuli and nutritious diet. The chills were very violent in character, and followed by profuse and exhausting sweats. Towards the close of his illness his intelligence, which had hitherto remained perfect, became impaired, and this condition gradually deepened until two or three days before death there was almost complete coma. The surface of the body also became covered with petechia and vibices, and death took place quietly.

Post-mortem examination, at which I was kindly invited to assist, revealed the following:—

The body large, well formed, and fat; the cadaveric rigidity marked; petechia much faded.

*Brain* pale; substance normal, with the exception of the left middle lobe of the cerebrum, which was much softened; no effusion; meninges healthy.

*Heart* pale yellowish colour; much loaded with fat; texture friable; right side dilated; valves normal.

*Lungs* pale, crepitant throughout, a few calcareous nodules in posterior part of the right lung, it being also bound down by a few old adhesions.

*Liver* rather soft, of a grayish-yellow colour, with a faint greenish tinge; the microscopic characters were those of advanced fatty degeneration, with a slight increase of the fibrous structure.

The gall-bladder contained about fʒiiss of healthy looking bile.

*Kidneys* pale, soft, cortical substance rather diminished, the secreting cells were diminished in number and contained granular fat.

*Spleen* slightly enlarged, splenic pulp of rather soft consistence and of a reddish-brown colour. On the left inferior extremity of the organ, immediately beneath the capsule, was found an excavation containing about fʒss of fluid of a reddish-brown colour, resembling ichorous matter; the walls of this cavity were about two lines in thickness, of firmer consistence than the remainder of the organ, and of a yellow colour, resembling concrete pus or cheesy tubercle.

The *microscopic characters* of the walls were shrivelled granular cells, cells with single nuclei, fat granules and globules. The fluid in the cavity consisted of shrivelled granular cells, cells with single nuclei, blood cor-

puscles, fibres apparently the broken-down trabecula of the spleen, fibrous cells, a few masses of angular opaque reddish-black pigment, fibrinous flakes.

*Splenic pulp* of normal character. Blood, dark and fluid.

Dr. BRINTON stated that in military practice he had met with many cases of metastatic abscesses of the spleen, liver, and lungs, occurring after inflammation of the knee-joint, the result of gunshot injuries; and also after gunshot injuries of the bones, especially of the femur; and after osteomyelitis following amputation. He used the expression "metastatic abscesses," although he doubted whether the term abscess was at all times strictly applicable to the lesions in question. In many of these instances of metastatic deposit he had been enabled to make careful dissections of the parts involved, and as far as his experience went, it was rare to find that these so-called abscesses in reality contained pus. The external appearances of the diseased parts were those indicative of purulent deposit, but microscopically examined, the contents of the cavities proved to be a disintegrated and disorganized mass, consisting of oil globules and shrivelled granular cells and fibres. In the great majority of cases no pus cells or globules could be discovered, and the deposits appeared to present gangrenous rather than purulent characteristics.

Dr. Brinton stated that in most of the secondary or metastatic deposits in the lungs which he had examined, thrombi were present in the larger veins and particularly in the femoral and iliac veins. In these cases the deposits in the lungs were of a cheesy consistence, and were devoid of pus corpuscles. Dr. Brinton also remarked that he had not in any instance succeeded in convincing himself of the existence of the detached masses of emboli alluded to by Professor Virchow in his lectures on Thrombus. In metastatic deposits in the lungs of the most circumscribed character, and in every stage of development, he had again and again sought for the small clots in the vessels described by Virchow, but he had never succeeded in detecting them. While he was far from denying that such clots might be detached from a larger and central clot, and might be carried by the circulation to a remote organ, and there lodge, and thus act as a predisposing cause of metastatic deposit, he could only say that the most careful dissection on his part had failed to reveal this fact in any of the many specimens of secondary deposits which had come under his notice.

Dr. Hutchinson remarked that he had seen such a condition of the spleen as in the specimen presented by Dr. George Pepper, associated with some form of disease of the heart and dependent upon an embolus which had lodged in one of the branches of the splenic artery. In this case he understood the arteries had not been examined, but the heart was found to contain an old clot. The matter contained in these so-called abscesses did not ordinarily present the microscopic appearances of pus.