

time he drank a little milk. At 11.30 P.M. the nurse thought he was dying, and called Mr. Walsh, who found him fast asleep, his respiration being only four per minute. He was awake, when he said he was very comfortable, his respirations while awake being normal. In a few minutes he fell asleep again, when his respiration once more dropped to about four per minute, and was rather stertorous in character. In about an hour's time his respiration became normal.

On July 30th he was very drowsy all day, sleeping continually, though easily roused; temperature 101.8°. Next day he seemed much better.

On Aug. 1st the temperature went up to 102.1°, the pulse being 114 and the respiration 24. On the 2nd the drowsiness had nearly passed off; the ligature came away, the wound looking sloughy; temperature 99.2°. Four days later (the 6th) the wound had almost healed, and for the first time the right pupil was noticed to be contracted and the left dilated. On the 11th the pupils became very nearly equal. On the 14th the pupil of the right eye again contracted; the wound was healed; he complained of pain in the left knee-joint, which was found to be swollen and inflamed; temperature 101°; a back-splint was applied. On the 17th the knee was perfectly well; temperature normal. On the 21st he was discharged quite well, but with the right pupil still contracted and insensible to light.

On Oct. 23rd he came to show himself. Said he was quite well, though he looked rather heavy and dull. The right pupil was still contracted and insensible to light, while the upper eyelid drooped a little. The vision of both eyes was perfect.

Remarks by Mr. WALSH.—I have thought this case worthy of publication—first, because of the extreme danger attending wounds of the internal jugular vein, for even if hæmorrhage be arrested (and many cases are on record where the attempt has failed), unhealthy inflammation with all its dangers frequently supervenes. Mr. Bryant says that “wounds of the internal jugular vein are probably more fatal than wounds of the carotid, and when near the cardiac end, in addition to the danger of hæmorrhage, is added that of introduction of air into the heart.” There is also secondary hæmorrhage and pyæmia looming in the future as a probable complication. Secondly, I do not remember to have experienced so much difficulty before in seizing the bleeding vessel, the depth of the wound being considerable, and the space before enlargement contracted. Thirdly, the after-symptoms were rather inexplicable. Why should his right pupil be contracted and remain so? His head symptoms, as denoted by his extreme drowsiness, his infrequent respirations, &c., might be accounted for by his exhaustion from the loss of blood. Then, again, his threatened attack of pyæmia of the knee, which passed off in a day or two. Could a filament of the sympathetic nerve have been included in the ligature, and, if so, would that account for the above symptoms? Of course, it is clear that neither the descendens noni nor the par vagum was injured, or more serious results would have followed.

HOSPITAL FOR SICK CHILDREN, BRIGHTON.

TETANUS FOLLOWING A FALL ON SACRUM; DEATH.

(Under the care of Mr. LEIGH.)

FOR the following notes we are indebted to Mr. W. Gilchrist Burnie, M.R.C.S., late resident medical officer.

W. M.—, aged ten years, was on Friday, August 2nd, in practising gymnastics, turned backwards over a horizontal bar, and fell on his sacrum. He did not at the time feel hurt, but next morning complained of pain in his back and belly in getting out of bed. He got about on that day. On the 4th he suffered pain in his back, and was too ill to go to church. Next day, though still complaining of feeling out of sorts, he got up and had a swim in the sea. On the 7th, at dinner, where he was sitting propped up because his back was stiff, his neck suddenly became rigid and his jaw fixed. He was now seen for the first time by a medical man, and again on the following day, during which day the symptoms seem to have been increasing. Twice during the 8th he had a spasm, jumping and clutching the bed, and complaining of tightness in the throat and præcordia.

On August 9th he was admitted. There was marked opisthotonos and trismus. Pulse 80; temperature 98°. The bowels had been confined since the 2nd. Ordered to have

four grains of calomel and an enema. Diet to consist of milk, eggs, beef-tea. On the 10th the bowels were open freely (three times). Pulse 104; temperature 100°. There was no marked improvement, but, if anything, the opisthotonos was not so great. He preferred sitting up, supported under the shoulders. Hands and arms not affected. Ordered four grains of chloral hydrate every three hours. At eight o'clock next morning he was seized with dyspnœa, and turned black in the face; his arms and legs were fully extended, the hands were clutched, and the thumbs down. This condition lasted nearly half an hour, then he gradually improved. At 10 A.M. he was free from pain; the limbs were relaxed and flexible; the jaw was still fixed. He had taken two pints of milk, a little beef-tea, and one egg. Bowels not open; pulse 112. Enema to be repeated, and to have ten grains of bromide of potassium added to the chloral. He had another fit about 3.30 P.M., after some difficulty with his medicine, his condition being the same as in previous attack. During the night he was restless, and started several times. He took milk, &c. At 5.30 on the morning of the 12th, without apparent cause, he had another fit, and again another, more violent, at 11.30 A.M. During the latter he turned over on his side, the bowels acted at the time, and urine passed involuntarily. The saliva was tinged with blood. A quarter of an hour after the skin was moist; pulse 120; temperature 100°. He could open his mouth more (about three-quarters of an inch); the tongue was coated. He swallowed a dose of medicine pretty easily. The back and neck were arched about the same. He complained of pain in the pit of stomach, which compelled him to “jump up,” as he himself said. The spasms returned with increasing frequency. At 11.40 P.M. he had a severe spasm, after which he fell into a doze. Temperature 99.2°; pulse 100. On the 13th, about 10.20 A.M., he had another severe spasm. Temp. 99.2°; bowels not open; pulse 100. At 12.30 P.M., had the most severe fit he had yet had. Chloroform was administered, with the effect of giving the boy a quiet sleep. At 3.30 P.M., he had a severe fit, which lasted twenty minutes. No chloroform was given. At 4.30 P.M. he had another fit; chloroform given, after which he was comparatively quiet. At 5 P.M. the pulse was 120; temperature 100°. Ordered to have his medicine in form of enema, fifteen grains of chloral, and ten grains of bromide of potassium. At 11.45 P.M. he had had no more fits. Had a little milk and beef-tea; had dozed; skin moist. Pulse 100; temperature 101°. On the 14th, at 2 A.M., Mr. Burnie was called to him, and found him in a very severe fit. Chloroform was administered, but it was necessary to desist before relaxation was produced, as the pulse almost stopped. Brandy was given, the pulse improved, and in about half an hour the fit passed off, and the boy dropped into a doze. At 3 A.M. he was again found in what appeared a slighter fit. During a spasm he, however, died before chloroform could be given.

Necropsy, 4 P.M., Aug. 14.—Body spare, but well-grown and well-nourished; rather muscular for the age. All dependent parts livid; upper parts blanched. Rigor mortis slight. No external signs of injury of any kind. Spinal canal opened, and cord removed from close to the skull to top of sacrum. In cutting through the muscles of the back there was no sign of bruising or injury; the blood was fluid. There was nothing abnormal about the dura mater of the cord, though its vessels were rather gorged, as were those of the pia mater, especially towards the lower end. The substance of the cord itself appeared natural, except in one place—viz., on its anterior aspect about equidistant from each extremity, where there was an oval patch about half an inch long, and nearly the breadth of the cord, which felt soft and was raised, and had a greyish colour. On cutting through the cord at the middle of this patch a difference in the appearance could be traced about one-fourth or one-third of the thickness of the cord; but, though the substance was softer at this point, it was not friable. (Owing to the pathologist to whom the cord was sent being away from home the specimen was not received until too much changed to allow of a microscopical examination.) On turning forward the scalp, there were observed on the inner side of it, somewhere near the anterior fontanelle, six or eight spots, from the size of a hemp- to a millet-seed, like little bruises; but there were no corresponding marks on the cranium. The dura mater was somewhat gorged, and was universally firmly adherent to the inside of the skull. The brain, though rather large and congested, was otherwise healthy. No further examination was permitted.