

TRANSACTIONS OF THE PHILADELPHIA ACADEMY OF SURGERY.

Stated Meeting, February 5, 1894.

DR. WILLIAM HUNT, President, in the Chair.

FLAT-FOOT RELIEVED BY STEEL-SPRING INSTEP ARCH.

DR. THOMAS G. MORTON related the case of a gentleman who suffered from an acquired aggravated talipes valgus of the right foot, in which case very great improvement was at once secured by applying a lateral support to the weak ankle, and a steel-spring arch in the shoe.

The spring arch is fastened in the shoe directly under the tarsal arch ; it is made of two elliptical pieces of steel which are three and a half inches long and two inches wide ; one plate is flat, the other is arched on its inner side, which is intended to support the tarsal arch ; the plates are joined together at their outer edge by a stout hinge, and the upper or arched plate on its inner side comes in contact with a lump of rubber which, when pressure is made from above, yields and gives the spring to the foot.

LITHOLAPAXY FOR STONE IN THE BLADDER.

DR. THOMAS G. MORTON related the histories of three cases in which he had recently removed calculi from the bladder by the Bigelow evacuator after crushing. They all recovered without complications.

DR. WILLIAM W. KEEN called attention to his suggestion that in every case of renal colic the bladder should be systematically, and as a routine practice, washed out with the Bigelow evacuator, if the stone is not discharged within a few days.

DR. H. R. WHARTON related the case of a boy who had been subjected to litholapaxy, but in whom shortly afterwards, the patient meanwhile having come under his own care on account of continued

vesical symptoms, by cystotomy he found a large stone, which presented still the marks of the lithotrite.

Dr. MORTON stated that he was of the opinion that any patient who has undergone litholapaxy should be sounded at intervals of three months afterwards, whether he has any symptoms or not.

PISTOL-SHOT INJURIES OF THE OPTIC NERVES.

DR. THOMAS G. MORTON related the history of a man, twenty-nine years of age, who had received a pistol-shot wound of the face, the ball penetrating the right superior maxillary bone just below the orbit and passing backward and to the left until it penetrated the cranial cavity. On the day following the injury, the patient was rational, complained of no pain, and replied to every inquiry. The movements of both eyes were normal; vision was apparently not disturbed in right eye, large and small objects being distinctly seen; left eye was totally blind, pupil widely dilated, yet sensitive when light was thrown upon the right.

Ophthalmoscopic examination gave the following results:

“*Right eye.* Pupil about 6.5 millimetres, somewhat oval horizontally, feebly sensitive to light stimulus.

“Optic disk fair size, somewhat oval vertically, rather dull in color, well outlined, margins slightly elevated; fundus rather deep in color; veins very full; arteries somewhat contracted; media clear, so that all details are possible, but general definition defective, owing to the slight haziness of cornea; tension normal.

“*Left eye.* Pupil four millimetres, not absolutely immobile, but not responsive to light stimulus, either with right eye open or closed; somewhat sensitive when right is covered. Optic disk fair size and shape; definition very good; the temporal half is leaden white, devoid of vessels; all vessels contracted on the nasal side of disk and throughout fundus, which has distinctly anæmic appearance; arteries very much contracted; no structural change except just below disk margin, where there is a small horizontal hæmorrhage one millimetre in size; media perfectly clear; tension normal; eyes in good position; movements normal. Large ecchymosis, bulbar conjunctiva temporal side; observed to-day.”

On the eleventh day he died from septic meningitis.

Post-mortem.—The ball entered the superior maxillary bone just below the orbital rim, about one-eighth of an inch to the inner side of the infraorbital foramen, passing upward, backward, and to the

left through the nasal cavity, fracturing the ethmoid and vomer ; the orbital plate of the frontal bone was fissured, destruction of left olfactory, breaking through the body of the sphenoid, tearing away the lesser wing on the left side, completely severing the left optic nerve in its groove or foramen ; the ball then passed into the left frontal lobe, where it was found just inside a large wound which continued upward and slightly backward and penetrated nearly to the upper surface of the brain.

The brain tissue in and around this wound was softened and degenerated. Several fragments of bone were carried in the brain-substance by the ball, which was flattened and very rough. Evidence of suppurative meningitis existed over the entire base of the brain, and the vessels of the pia mater were markedly congested.

Dr. FENTON remarked that the most important appearance in this case was evidently the peculiar condition of the optic nerve and retina ; although the disturbance of the pupils seemed to indicate some injury to the oculomotor and the fifth nerve. This lent more credit to the case because, as Mitchell says ("Injuries of the Nerves"), "Muscular injuries of the motor nerve of the eye which do not at once involve loss of life are rare." It is interesting to add that this quotation is taken from an account given of a case seen by the author in consultation with Dr. Morton, in which he, the author, states that the case stands alone in the history of oculomotor-nerve lesions.

Dr. W. W. KEEN related the case of a man, about twenty-five years of age, whom he saw at the Presbyterian Hospital, in Chicago, August 9, 1893, in consultation with Drs. D. W. Graham and N. Senn.

About three years before he had been shot ; the ball entering just below the tip of the left mastoid. He was unconscious for a brief time, but when he recovered, either the same day or the next morning, he discovered that his right eye was absolutely blind. In addition to this, his right arm was paralyzed, but whether immediately after the accident or at a somewhat later period was not ascertained. When he saw him, the right arm was the subject of contractures, the result of the old monoplegia. The leg and face were not affected. There was a very marked aneurismal bruit and thrill, which could be felt down the left side of the head and neck. There was but little external swelling. The man sought relief on account of the noise produced by the aneurism, which made it impossible for him to do any work.

August 15 he ligated the common and external carotid arteries and the jugular vein of the affected side.

Considerable difficulty was experienced in consequence of the inflammatory adhesions resulting from the gunshot wound of three years before, and also from the fact that the vessels lay nearly under the middle of the sterno-cleido instead of under its anterior border. Even the ligation of the external carotid above the bifurcation was quite difficult by reason of the adhesions. It was done just at a point where the first branch was given off, and the ligature was made to include both the external carotid and its branch in one loop. The jugular vein was tied at a point half an inch below the level of the ligature around the common carotid, in order that the necessary injury to the tissues should not be at the same level. The veins were very full, giving thus an additional evidence that the diagnosis of arterio-venous aneurism was correct.

The wound healed practically by primary union. One angle was a little slow in closing, but there was no purulent discharge at any time. The morning after the operation ptosis and immobility of the left eyeball were discovered, although he could turn the globe outward somewhat and slightly upward. The pupil was not affected, but responded to light. There were no mental disturbances or paralysis. In two or three weeks improvement began in the eye, and when he left the hospital, four weeks after operation, he could keep the lid up nearly in a natural position, and could move the eyeball in every direction, promising complete restoration from the paralysis. His later history is unknown.

In this case the ball, after traversing the blood-vessels, entered the skull at its base, and without doubt cut the right optic nerve between the eyeball and the chiasm. The paralysis of the right arm was due of course to the involvement of the left motor cortex, or fibres proceeding from it. Whether the ball in entering the skull was split into two pieces, one of which injured the left cortex in the arm area, and the other the right optic nerve, or whether the paralysis of the arm was due to an embolus from the arterio-venous aneurism, can only be speculated on. None of the ball was ever found. What the final result as to the aneurism will be has not yet been ascertained.

Dr. KEEN inquired of Dr. Morton if, in his case, there would have been any advantage in opening the skull over the left eye in order to be able to make the wound aseptic and provide for

drainage? This might have rendered it possible later to have extracted the ball when it came down to a lower level.

Dr. MORTON replied that in this case, after the alcoholism had passed off, there was no evidence of brain injury with the exception of the loss of sight in the left eye. It was impossible to say whether or not the ball had penetrated the brain. When delirium came on and it was necessary to confine the patient, he was in a very grave condition which did not warrant any operation. The post-mortem showed that good-sized fragments of bone had been carried into the brain, and there was a general basilar meningitis with little or no pus.

Dr. J. M. BARTON said, with reference to the question of operation in pistol-shot wounds of the brain, that in a recent medico-legal case he had looked up the mortality of cases where the ball was removed as compared with the mortality where it was not removed. He had been surprised to find that the death-rate was nearly the same in both instances, out of some seven or eight hundred cases.

Dr. H. R. WHARTON remarked that he had had at the Presbyterian Hospital a case of pistol-shot wound of the brain similar to that reported by Dr. Morton. The patient, a boy, had blindness of one eye immediately following a pistol-shot injury, the ball entering near the inner canthus of the left eye. The boy recovered with the exception of the blindness, and left the hospital in three or four weeks.

THE USE OF STRONG CARBOLIC ACID IN SURGERY.

Dr. OSCAR H. ALLIS read letters received by him from distant physicians detailing the favorable effects observed by them from the application of carbolic acid in full strength in burns, buboes, boils, and inflamed glands. He himself called special attention to the use of liquid carbolic acid, full strength, or, if the crystals are used, only enough water added to make a solution, as an immediate application to all varieties of burns. To think of applying to a raw and agonizing burn that which would scald a healthy cutaneous surface would seem to the unreflective mind a reckless and wantonly cruel act. But when we consider that a raw burned surface is painful from its exposed nerve-filaments, and that the strong acid combining with the albumen of the tissues forms a coating that excludes the air, while at the same time it benumbs—paralyzes—each terminal exposed nerve-filament, the remedy seems to be the result of a happy inspiration.

He urged a careful use of this drug in deep sinuses, no matter in what direction they run nor how deep they may penetrate.