

mission on October 26th, 1861, when his state was as follows:—He was tall and slight; his manner nervous and excited; his general appearance that of a man suffering from phthisis. On the inner side of the left ankle-joint was a large, soft, circumscribed swelling. No distinct fluctuation could be felt. There was also a general fulness over the whole joint, and over the instep. A linseed-meal poultice was applied to the swelling; and he was ordered house diet and a pint of ale.

Oct. 19th. Tincture of iodine was applied.

Nov. 5th. The entire swelling had increased, and there was also considerable redness of the surface. A free incision was made into the swelling over the inner ankle, and some bloody pus escaped. No dead bone could be detected. Pulse very quick; breathing very rapid. His manner was excited. He was ordered an effervescing saline mixture, and an opiate at bedtime.

Nov. 10th. He continued to get worse. On his chest being examined, the right lung was found, on percussion, to be dull from base to apex. There was bronchial, almost tubular, breathing at the apex. No breath-sound could be heard at all elsewhere. There were no rhonchi. The swelling of the foot was much increased. Another free incision was made, which gave exit to bloody pus. He was ordered quinine and ammonia, with opium, beef-tea, and brandy.

Nov. 11th. He was very delirious during the night, but quieter in the morning. Pulse feeble and rapid; tongue brown and dry. He had slight cough, with no expectoration. He appeared to be sinking, and was well supplied with stimulants.

Nov. 15th. He had been gradually getting better; but suffering from diarrhoea, which was checked by chalk mixture.

Dec. 3rd. The limb was placed on a Macintyre's splint. Free incisions were made on the dorsum of the foot, from which escaped much unhealthy-looking pus.

Jan. 16th, 1862. His general health, with aid of brandy mixture and other stimulants and tonics, had considerably improved. His right lung was still dull; but his breathing was better, and his cough less. The foot, however, was worse; it was everted, and the ankle, as well as the tarsal and metatarsal articulations, seemed to be thoroughly disorganised.

Chloroform having been administered, the leg was amputated at the lower third; Mr. Teale's method of the long and short rectangular flaps being adopted. The operation occupied more time than the flap operation; but when completed, the stump presented a much better appearance than could have been obtained by the flap operation. The flaps having been united by silver wire sutures, and the stump treated in the way suggested by Mr. Teale, the patient was removed to his bed. The hæmorrhage during the operation was very slight. On dissecting the amputated foot, entire disorganisation of the ankle-joint, and of the tarsal and tarso-metatarsal articulations, was found. All the articular surfaces were denuded of their cartilages; the bone substance was soft and pulpy; and between the astragalus and os calcis was a collection of unhealthy grumous pus. The patient bore the operation very well; an anodyne draught was administered; and he slept quietly.

Jan. 17. He slept well last night. Pulse quiet; skin cool. He complained of but little pain.

Jan. 19th. There was slight discharge from the wound. The expression of his face was much improved.

Feb. 1st. He was continuing to do well. The stump looked healthy. A small slough came away from one corner of the anterior flap. All the ligatures had come away. A bandage was put over the upper part of the leg to prevent the patient from tilting the limb up-

wards, and the consequent pressure of the end of the tibia against the anterior part of the stump.

Feb. 10th. There was a small sinus, but no dead bone felt. The stump had otherwise just healed. The patient's general health was vastly improved. His appetite was very good. He took cod-liver oil and plenty of nourishment, and was getting fat. The dulness over the right lung was gradually diminishing.

Feb. 28th. He was out of bed to-day on crutches.

March 21st. He walked about the garden on crutches. The sinus was all but healed up.

March 28th. He was discharged cured.

Original Communications.

CASE OF POST-PARTUM CONVULSIONS.

By WM. BOYD MUSHET, M.B., Fulham.

J. C., aged 26, a very poor and strongly built woman usually in good health and employed at hard work, was confined on Jan. 13th of a dead child by a midwife. She had previously had three children and a miscarriage. Labour was said to have been easy, with some after-pains. The milk disappeared on the fifth day, when she sat up. She got up daily, and remained well until the eighth day, but on the ninth complained of pain in the head, and over the eyes, and her face seemed swollen. She swelled much below the knees before her confinement. On the tenth day she was much the same; but about 9 P.M., quite suddenly, she was seized with violent convulsions, which rendered her livid and insensible, and much blood escaped from the mouth in consequence of the tongue being lacerated. The fits continued, on and off, throughout the night, without intervals of consciousness. I first saw her on the following morning about 6.30 A.M., when she was not convulsed, but completely comatose, with pupils contracted almost to a point. The face was calm and pale; the breathing stertorous; the limbs were not rigid; and there appeared to be a general puffiness of the body, especially of the neck, legs, and feet; but no pitting was produced on pressure (anathumiasis). The pulse was slow, small, not wiry. The lochia had stopped. I ordered five grains of calomel, with a drop of croton oil; five grains more to be given in four hours if they did not act.

I saw her again at 1 P.M. There had not been any action of the bowels; but much urine had passed. She was much the same, and had had several more fits. I myself administered two drops of croton oil, and ordered a blister to the nape and sinapisms to the calves.

In the evening at 9 P.M., she was still insensible, and the croton oil had not acted. The fits had returned at intervals, with blood from the mouth. The pulse was fuller, the surface hot, the face flushed, the pupils dilated and insensible. The blister had drawn well. Twelve ounces of blood were taken from the left arm, which, the next morning, did not exhibit any trace of buffiness or cuppiness. The venesection was difficult, on account of her fat and puffy condition. Ten grains of calomel were given; and a mixture of tartrate of soda and nitric ether was ordered to be frequently poured down her throat with a spoon.

The next morning, she was still insensible, and was reported to have had several more fits, but not so strong or so long in duration. The bowels had never acted. She was ordered half a drachm of jalap and calomel, and an enema of turpentine, salt, and gruel. The latter brought away a large quantity of fecal matter. (This would have been earlier administered; but I could not procure any one to undertake the task; and I,

though not squeamish, personally recoiled from it, on account of her filthy abode and surroundings.)

The next day, at 1 P.M., it was reported that she had not had a fit since 11 P.M. The pupils were dilated, the face calm, the respiration easy. She was soporose, and I attempted to rouse her. At length, after pinching, and bawling loudly several times "Do you feel better?" she slowly answered "yes," and then seemed to relapse into unconsciousness. She had not spoken for sixty-four hours. The lochia returned this morning. I was afterwards told that she did not again speak until 10 P.M. The next day she was lethargic, but sensible; and said she could eat something. The pulse was quiet; the surface warm; and the pupils moderate. The urine, which I had not previously examined or drawn off, was very high coloured, and contained a very large amount of lithates, but no albumen. The tongue was clean, but greatly lacerated. The bowels had not again acted. The lochia had disappeared. She said she did not remember anything that had passed. Little remains to be detailed. She took plenty of beef-tea; the bowels acted well spontaneously; the general swelling rapidly disappeared; and, except with occasional headache, she recovered well in about a week.

REMARKS. Waiving the consideration of therapeutics, which could hardly be efficient, owing to the highly unfavourable circumstances to which the patient was subjected, I shall dwell briefly on one or two points of pathological interest. *In limine*, I imagine, the case will be conceded to be one of puerperal eclampsia.

It is familiar to all that this affection is very seldom encountered after delivery. It is also a clinical fact, that it is infinitely rare, except in the primiparous female. According to Dr. Rigby, in two cases which came under his notice, where it occurred in multiparæ, it did not appear until after delivery; but the period is not noted. In neither case, I apprehend, was the advent of the seizure so protracted as in the one here narrated.

The long duration of the coma, coupled with the recovery of the patient, is a feature worthy of remark.

Lastly, the causative agency may be considered; and here I may state that Dr. Nebinger (*BRITISH MEDICAL JOURNAL*, Feb. 8th, 1862) affirms that "the nature of puerperal convulsion is yet undecided;" that the cause or causes are undetermined; "that uremia is the only cause, is not only doubted, but denied, if not disproved." The case before us establishes the correctness of these propositions.

I may admit, that I somewhat confidently ascribed the attack to, or at least deemed it to be associated with, imperfect renal function, on account of the general puffiness of the superficial tissues; but examination of the urinary secretion did not reveal the presence of albumen, although it should not be forgotten that the analysis was deferred until the fourth day. It may be added that Dr. Rigby, in treating of puerperal convulsions, makes no reference to the condition of the urine.

The abundance of lithates would indicate some mal-assimilative process, and suggests the possibility of connection between the convulsions and disturbance of the normal retrograde metamorphosis of the uterus, which accompanies post-parturient involution.

The patient, doubtless, rose too soon after her confinement; viz., on the fifth day. Dr. Simpson observes "both in the healthy and in the morbid state, the uterus is apt to become more congested, when the patient assumes the erect position, and a morbid degree of congestion interferes with various physiological functions." Hence it may, with some probability, be inferred that the attack was precipitated by uterine irritation or congestion; nevertheless, on reviewing all the facts and symptoms, it must be assented that its etiology remains obscure.

HARD CATARACT AND SOFT: THE CONDITIONS ON WHICH THE DISTINCTION IS FOUNDED, AND THE PRACTICAL BEARING OF SUCH CLASSIFICATION:

BEING REMARKS IN THE COURSE OF CLINICAL INSTRUCTION AT THE CENTRAL LONDON OPHTHALMIC HOSPITAL.

By HAYNES WALTON, Esq., F.R.C.S., Surgeon to the Hospital, and to St. Mary's.

I AM quite sure, from much experience, that I shall best impart the instruction I wish to convey respecting the difference in cataracts, and the appropriate operations, by recognising only two kinds, the hard and the soft, as founded on lenticular degeneration; and disregarding any special consideration of opacity of the lens-capsule in the sense of capsular cataract. It is the only truly practical manner of treating the subject, because it is founded on the way in which it is regarded in actual practice. I find that when a student, without any previous knowledge, follows my practice, and receives his instruction after this method, he more readily acquires the desired information than he who brings with him, from previous reading, the terms capsular cataract, capsulo-lenticular, cortical, nuclear, etc. Not that I quarrel with such, but would certainly keep them out of the way, at least till the learner has gathered some substantial knowledge of the disease, and can trust himself to discriminate what he sees. It is chiefly on account of the complex description met with in text-books, and the very many terms relating to cataracts, that few students, with even good opportunities before them, ever master the subject. I cannot forget how I was bewildered with the names, and almost threw up the study in despair, when, after the "true cataracts", I found described the "spurious", including the pigmentous, the purulent, the sanguineous, and many others—expressions which are founded on conditions that can exist only in disorganised eyes, and literally bear no pathological connexion whatever with cataract as disease of the crystalline lens, and had far better never have been invented. I am sorry to be obliged ever to allude to them, and I beg you to forget them immediately.

I shall speak, therefore, only of hard cataract and soft. I think that the terms are more correct and less objectionable than any that have been suggested.

It is an universal rule, that the lens never loses its transparency and becomes a cataract without alterations in its tissue. It degenerates in different ways at different periods of life. Hard cataract is essentially a disease of elderly and old persons. As we grow older, the lens changes some of its physical characters, and between the fortieth and fiftieth year of our existence has become palpably denser, especially in the centre, and more or less of an amber tint.

Hard cataract is opacity appearing in a lens so changed. It can, therefore, never appear before the middle period of life. The statement, yet to be found in the writings of some of our living authors, to the effect that it is occasionally met with even in children, is not correct, but a mistake made in utter ignorance of the facts that I have mentioned.

So soon as the cataract begins to form, structural degeneration of the lens sets in. When formed, the superficial portion is preternaturally soft, sometimes softened down to a semifluid mass. This arises from softening and more or less disintegration of the lens-fibres, which are dotted over with fine molecular matter, also found floating free in masses, filling up and rendering opaque many of the superficial lens-cells, of which the very circumference of the lens is made up—that part of it which is in contact with the capsule. The nucleus is, on the contrary, hard, and dry to a degree far exceeding