in the same, which spread up the right side, ending in general convulsions and coma of some duration; and on return of consciousness complete right hemiplegia of leg, arm, and lower part of face, with motor aphasia. On Sept. 5th Mr. Lansdown, the senior surgeon to the hospital, at my request trephined over the upper part of the fissure of Rolando, close to the anterior posterior mesial line of the skull. Reid's lines were used, and the operation performed under strict antiseptic precautions. The trephine aperture measured about an inch and a half in diameter; the bone was dense and very much thickened, and the dura mater firmly adherent to it. The dura mater looked opaque, and there was absence of pulsation over the exposed area. On incising the dura mater, it was found to be occupied by a dense growth, about half an inch thick, of almost cartilaginous consistence, white and slightly lobulated; it appeared to extend chiefly inwards and somewhat forwards. So far as possible it was removed, but from the close proximity of the longitudinal sinus, it could not be entirely removed in this direction. The subjacent convolutions had a perfectly healthy appearance. Mr. Lansdown replaced the button of bone, in the hope that its presence might stimulate the filling up of the area with new bone. For two days after the operation twitchings in the right foot muscles occurred, differing from those felt previously to the operation in being slight, in not lasting more than a few seconds, and in showing no tendency to spread. After the second day no twitchings occurred except whilst the head was being bandaged during the dressing of the wound. On the fourth day he appeared to be doing well, and had recovered to some considerable extent the use of the right arm and leg; slight ankle-clonus could still, however, be obtained on the right side. On the sixth day the first bad symptoms appeared; there was a rise of temperature, and almost complete loss of power on the right side followed; during the night and the following day he was partially comatose. The wound was reopened, and the button of bone with some matter around it removed, with slight temporary improvement in his condition; but he afterwards grew steadily worse, became completely comatose, and died on Sept. 24th.

At the necropsy, the calvaria was dense and very much thickened, with absence of diploe, and the dura mater everywhere adherent to the bone. On separating the flap of the operation wound, an abscess cavity was found, its walls covered with greenish-yellow pus, and its floor formed by the upper extremities of the ascending frontal and parietal convolutions; firm adhesions shut off this cavity except in a direction downwards and forwards, and in this direction the cortex was softened; the upper parts of the two convolutions above-mentioned were disorganised. In front and to the inner side of this area there were two masses of new growth, hard and cartilaginous in consistence, and smoothly lobulated; that to the inner side grew from the upper part of the falx cerebri around the superior longitudinal sinus, was nearly half an inch in thickness, and had exerted much pressure on the paracentral lobule, which was flattened by it; that in front was not above a quarter to one-third of an inch in thickness, and the subjacent convolutions showed no sign of pressure. The growth was evidently of old date, and except in the area above-mentioned there was no sign of any inflammation about it in any part. The incision in the dura mater had come close up to the longitudinal sinus, which had apparently been pushed aside. The other organs showed no lesion of any importance. On microscopic examination, the structure of the growth was evidently that of a very chronic syphilitic new growth; the motor convolutions showed signs of acute cerebritis decreasing in intensity as one proceeded away from the wound. The thickest part of the growth was that removed at the operation. Mr. Lansdown attributed the occurrence of suppuration to the irritation set up by the replaced button of bone. The reasons that induced us to recommend operation were that the patient's condition was rapidly growing worse, although anti-syphilitic remedies had been thoroughly persevered in for some time; that the seat of the lesion could be fairly accurately determined; and that both the patient and his friends were very urgent that any measures should be tried, which would, if successful, enable him to return to work. On the other, the morbid process being syphilitic, there was difficulty in determining the exact nature and seat of the lesion. The symptoms presumably might be due to (1) a node growing inwards from the cranial vault, (2) to repeated

attacks of meningitis with resulting adhesions, (3) to chronic cerebritis, or (4) to a gumma, or with great probability to a combination of two or more of these processes. The presence of a rapidly growing tumour in the substance of the motor convolutions could be excluded with tolerable certainty in the absence of optic neuritis and other characteristic symptoms. On consideration it seemed most likely that the morbid process present consisted in the presence of a tumour outside the cortex and probably in the dura mater, its position being over the extreme upper ends of the ascending frontal and parietal convolutions, and that from this as a centre a zone of irritation spread through the surrounding cortex. The symptoms, so far as the position of the lesion was concerned, clearly pointed to the one above stated, the site of the aura, the order in which groups of muscles were successively convulsed, and the degree of paralysis remaining in the various groups after the fits all corresponding with this. The aura was felt always to begin in the right great toe, the muscles of the great toe and then those of the foot were the first to be convulsed, and after the fit the most completely paralysed; the muscles of the leg and thigh were next in order of convulsion, corresponding to the paracentral and upper third of the ascending frontal and ascending parietal convolutions as chiefly affected by lesion. Then followed convulsion of the arm and hand muscles, twitchings of the right angle of the mouth, with subsequent drawing of the face to the left, and motor aphasia indicating that the motor cells of the middle and lowest part of these convolutions, together with the base of the third frontal, had been discharged. Lastly, there was extension of symptoms to the opposite side. It was impossible, from the nature of the case, to say to how great an extent the mischief had spread; whether it could be completely removed or whether unforeseen complications would render the operation futile. We explained the nature of the case to the patient and his friends, and they wished the operation to be performed.

Two other interesting points in the case may be noted—first, that there was distinct deficiency of sensation over the right side; secondly, that the patient, although a left-handed man, appeared to be left-brained as regards speech, contrary to the usual rule. No lesion was detected in the neighbourhood of the speech convolutions on the right side.

Clifton.

A CASE OF LABOUR FOLLOWING CLOSELY AFTER CONGESTION OF THE LUNGS, DYSPNŒA, AND DROPSY, THE RESULT OF ADVANCED HEART DISEASE.

By R. C. MILLER, M.B., C.M.

WHILE acting for a few days in the place of my friend, Dr. Maclean of Peebles, the following case came under my observation, the particulars of which I think may be of interest, partly from the comparative rarity of such cases, and partly from the various interesting questions connected with them.

On Thursday, April 11th, I was called in to see the patient, Annie D—, aged twenty-five, unmarried, and a millworker. She was suffering from severe cough, accompanied by pain and dyspnœa. Auscultation over the region of the heart revealed an extremely loud and well-marked mitral regurgitant murmur, accompanied, as I believe, also with some mitral stenosis. The lower extremities were cedematous, the pulse somewhat feeble and rapid, and some little cedema at the base of the right lung was present. In addition to these symptoms—and it is this which gives the case its peculiar interest—the patient was pregnant, and expecting her confinement soon. I may say here that her condition was not unknown to me at the time of this my first visit, as my friend before leaving had mentioned the case to me as being a serious one. However, the aggravation of the symptoms, and in particular the distressing dyspnœa, rendered an immediate visit necessary, and examination amply confirmed the serious state of matters of which I had been informed. The dyspnœa and cough were giving her most trouble when I first saw her, and I ordered her a mixture of tincture of digitalis, spirit of chloroform, and nitrous ether, besides putting her on brandy, beef-tea, &c. On the following day her con-

dition was unchanged, the dyspnoea and cough being still troublesome. Towards night she was evidently worse, while some congestion and oedema were present at the bases of both lungs. Next day (Saturday the 13th) she was evidently sinking—pulse becoming weaker, and the congestion extending over the lungs, while the other symptoms were in no way lessened in severity. In the afternoon I deemed a consultation necessary in view of the circumstances of the case, and Dr. Gunn was kind enough to see the patient with me. Examination showed the state of matters to be as above described, but the symptoms of heart failure were more pronounced than they were on my previous visit; the congestion and oedema were now general over both lungs, anteriorly and posteriorly, the pulse 130 and very weak, and cyanosis was now a prominent symptom. At this time I may add, too, that examination of the abdomen failed to detect the foetal heart-sound. The woman's condition, indeed, was such as to apparently exclude all hopes of recovery, and Dr. Gunn and I were of opinion that she would not live over the night. Meantime we increased the quantity of brandy administered, prescribed a mixture of strophanthus, ether, and tincture of perchloride of iron, and gave orders for such means as we deemed necessary to relieve the general symptoms. About 11 P.M. I saw her again. She was evidently sinking fast, and I felt in no way disposed to take a more favourable view of the case than I had previously. On calling next morning, to my surprise, I found the patient not only still alive, but distinctly better. The congestion was still marked, though somewhat diminished, while the cough and dyspnoea were decidedly better, the pulse slower and stronger, and, generally speaking, her condition was a marked contrast to that of the previous evening. The treatment as above was rigorously followed, and essence of beef was ordered to be taken at regular intervals. At night I found the patient still improving and her general condition satisfactory. She had passed a large quantity of urine during the day, and the lungs were becoming gradually clearer. During these two days of acute suffering there were no signs of the labour commencing; much to my satisfaction, indeed, as it is readily seen that the labour, complicated with the serious condition already described, would have gravely diminished her chance of recovery. The patient herself, as I have already said, did not expect her confinement for some little time. Early on the morning of the 15th—that is to say, little more than twenty hours from the time when her condition seemed hopeless—I was summoned, and found the labour had fairly commenced, and the os sufficiently dilated to allow of my making the diagnosis of the presentation. Her general health was fairly good, as far as was to be expected after her recent attack; the labour was progressing satisfactorily and I decided not to hinder the course of nature in any way. There was nothing abnormal in the course of the labour, which went on steadily during the day and with fair speed, considering the patient was a primipara. Stimulants, with beef essence, were administered repeatedly with the object of maintaining her strength. After a slightly protracted third stage (the presentation I should have said was cranial) the patient was delivered of a stillborn child, of apparently average size, and without any appearance to show that it had been dead for any length of time. The patient did well throughout the night and the following day, and as she gained strength the chest symptoms continued to improve. After this I was obliged to leave the observation of the patient's further progress to my friend, but from him I have since heard (fully nine days after the labour) that she is doing well, the congestion having quite disappeared, and with it the dyspnoea and pain.

Remarks.—In this case I am inclined to think that the dyspnoea and cough, that were so severe throughout the attack, may have had something to do with the bringing on of the labour. Dyspnoea is admitted generally to be a cause of abortion, and, as we know, Dr. Brown-Séquard demonstrated that the presence of an excess of venous blood in the system stimulates the uterus to contraction. We can readily imagine that in the above case the dyspnoea, with cyanosis &c., resulting in the presence of a large quantity of venous blood in the uterine sinuses, would excite the uterine fibres and thus bring on the labour. Another point was suggested to me from the marked improvement in the woman's condition that followed the night when her state seemed hopeless. We know that in the last days of pregnancy the uterus

falls slightly downwards and forwards. On this point Leishman, when speaking of the position of the womb in the abdomen, says:—"About the thirty-sixth or thirty-seventh week it reaches the level of the xiphoid cartilage; but between this time and the end of pregnancy it falls downwards and forwards preparatory to the phenomena of parturition." If we could grant that this falling downwards took place in the above case at the time when the heart was evidently failing, then it is easy to account for the improvement. This prolapse of the uterus would ease the upward strain through the diaphragm on the already enfeebled heart and lungs, and would account perfectly for the partial disappearance of the serious dyspnoea. In a certain class of cases when pregnancy is associated with advanced disease of the heart the question of inducing premature labour may have to be considered. It is manifest, however, that the induction of labour in the case described was not at all admissible as a method of treatment, during the course of such an acute attack, although one can conceive of many cases (such as, for instance, where the heart disease is complicated with serious debility &c.) where the induction of premature labour would not only be of advantage, but also highly necessary. In this case the *vis medicatrix nature* proved more powerful than I had expected.

Largs, Ayrshire, N.B.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

PROPOSED SURGICAL TREATMENT OF OPAQUE VITREOUS.

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AMONG the most unsatisfactory cases as regards treatment and prognosis that seek advice at our various eye hospitals those in which impaired or lost vision is due to the opacities of the vitreous form a considerable number. Unless such can be traced to specific disease, treatment is practically useless. The text-books do not even refer to the treatment of this serious condition, and I have never known a case which was improved by ordinary medical means. The causes of opaque vitreous, apart from the specific ones, which often do well under treatment are principally inflammatory conditions of the choroid, retina, and ciliary body, retinal hæmorrhages, changes occurring in progressive myopia, chronic and subacute glaucoma. In cachectic or strumous states, where the general health is much impaired, I have noticed a haziness of the vitreous; but frequently this condition occurs without any apparent cause. To sum up, this morbid state of the vitreous is one of the most unsatisfactory as regards treatment and prognosis in ophthalmology. The form of procedure I now adopt, when it is evident that the turbid condition of the vitreous is the principal obstacle to vision, is the removal of the opaque fluid by suction. The resecreted vitreous being naturally clear, the plan I adopt is as follows:—Taking a hypodermic syringe with a large bore, I snip up a small piece of conjunctiva above or below the external rectus, the globe being held firmly, and rotated inwards with strong fixation forceps, either by the operator or an assistant. I then insert the needle at the point indicated, and draw off from ten to eighteen minims of vitreous, the amount depending upon its consistence and upon the tension and general condition of the globe. The number of operations necessary in each case will, of course, depend on the amount of fluid removed, the condition of the patient's health, and the amount of benefit following each tapping. I have now operated several times in cases of opaque vitreous with such good results as to warrant me in recommending its trial to others engaged in ophthalmic work. I hope shortly to tabulate these cases, some of which are under observation, but as an example I append a few notes of my last case.

Mrs. C—, of Cowes, Isle of Wight, aged forty-four, other