the diseased parts a second time, but ulceration re-commenced, and the glands in the groin have enlarged, ulcerated, and discharged large quantities of black fungoid matter. I am uncertain if the poor man is yet living, but the last report which reached me of him stated, that he was gradually sinking under his accumulated miseries.

I should add, that the diseased toe was found to consist of a mixture of melanotic and fungoid matter, and that the softening had extended to the bone, destroying the articular cartilages.

[The preparations referred to were exhibited at the meeting.]

CASES FROM PRIVATE PRACTICE.

By JOHN RICHARD WARDELL, M.D., Edin.;

Late President of the Royal Physical and Hunterian Medical Societies, Assistant Pathologist in the Royal Infirmary, Edinburgh, &c. &c.

(Continued from page 574.)

CASE. III.

PUERPERAL CONVULSIONS.

February 2nd, 1847. Summoned in great haste at two o'clock this morning to see Ann W—, residing at a village two miles distant, who was reported to be in labour under the charge of a midwife, and very dangerously ill; indeed so precarious was her condition, according to the messenger, when he was despatched, that he thought it highly probable she was not then alive. On arrival I found the patient to be a stout, muscular, short-necked, young woman, apparently three or four and twenty years of age, lying on a bed in a state of unconsciousness. Her mouth and lips were besmeared with blood, and her looks seemed vacant and unnatural. It was stated that she had had lingering pains during the previous day and night, and that up to an hour before she was suddenly struck down in the first fit, she had not given any manifestations of any particular symptoms; she then complained of headache, which became more violent, and speaking of this a few moments before she fell down, she described it as being so intense that she felt as if her head were "opening and shutting." Two hours before this occurrence the pains were strong and much more powerful than they had been; they then almost entirely ceased. She had had four fits before my arrival, and during the intermissions she was scarcely, or not at all, conscious of what was passing around, or of her own condition, and tossed about the bed in a furious manner. Immediately after I had entered the room another paroxysm came on; the eyes became everted, the countenance greatly congested, the hands powerfully clinched, and the whole frame convulsively shook in the most alarming degree, whilst the foaming at the mouth, stertorous breathing, etc., added to the grave character of the scene. Her agitation and continuous efforts to throw herself off the bed were so strong that it was with difficulty that she could by two or three persons be restrained. The features quickly became darker, and the attack continued for a considerable period. After the fit had terminated the body

was raised in the semi-erect position, thus favouring the return of blood from the head. I then, as she was now somewhat tranquil, opened a vein in the arm by a large orifice, and at once abstracted no less than thirty-five ounces of blood. The pulse before bleeding was full and bounding, and increased in frequency. On introducing the hand the os-uteri was fully dilated, and the membranes entire. Snow being on the ground, this was constantly applied to the head, and a thorough perfusion of fresh air emitted through the apartment. Appearing now somewhat easier, the breathing being performed with less difficulty, I decided at once on delivery. The hand was carefully introduced, and the child turned and born in from twelve to fifteen minutes. Thirty drops of laudanum were then given, and the head ordered to be shaved immediately. She continued in a tolerable state of composure for four hours, at intervals having a short sleep, during which she would murmur in a low muttering delirium, and on suddenly awaking would distressingly mourn, roll her eyes, and speak in a quick incoherent manner, frequently changing her position in bed, and strenuously endeavouring to get up.

7 a.m. Another violent paroxysm came on characterized by the same symptoms as the former. On the termination of the fit the following treatment was pursued:—

Venesection to twelve ounces. R. Calomel., gr. viij.; Pulv. Opii, gr. ij. Sit pulvis statim sumendus. Empl. Lyttæ nuchæ. Sinapismi cruribus et spinæ lumborum. Hirudines xii. temporibus. Enema Terebinth. in Decoct. Amyl. Oiss., statim injiciend. Snow continued to the head.

4 p.m. No return of fits since this morning at seven o'clock; tossed about for a short time, when she became quiet, and slept three hours; on awaking appeared to be partially sensible; skin moist; pulse 90; injection came away mixed with a copious quantity of feculent matter; tongue swollen, and somewhat besmeared with blood.*

R. Tinct. Opii, gtt. xxx.; Aquæ, oz. iss. Sit haustus hora somni sumendus.

3rd. No return of fits; slept pretty well during the night; bowels opened; tongue moist; skin rather hot, and complains of headache; is quite sensible; pulse 86; blister rose well; has some pain in the inferior abdominal region; answers questions more coherently, but is not quite sensible.

R. Pulv. Jalap. Co., scr. ij.; Syr. Rhæad, dr. ij.; Sp. Ammon. Co., dr. ss.; Aquæ, dr. x. Sit haustus statim sumendus.

R. Liq. Ammon. Acet., oz. iss.; Spr. Æth. Nitr., oz. ss.; Mist. Camph., oz. iv. Sit mist. Capt., oz. j., quarta quaque hora.

4th. Does not feel quite so well to-day as yesterday; head aches, and complains of severe pain in

* Of course the requisite precautions were taken immediately on my arrival to prevent injury being done to this organ during the fits. The midwife who had been in attendance had omitted this, and indeed so ignorant was she of the nature of the affection, that she stretched the patient on the floor, expecting it was simple syncope. It is high time these incompetent practitioners had their functions suspended.

abdomen; countenance of a yellowish tinge; pulse 84; skin moist, and has sweated a good deal. Bowels well opened by draught; no lochial discharge; tongue moist and on the whole is going on favourably. Intellectual faculties much more natural.

5th. Had a better night, having slept for some hours consecutively; tongue moist, and skin not at all dry; pulse 88, tolerably soft; complains of less pain in head; no uneasiness on pressure over abdomen.

R. Infus. Calumb. Ten., oz. viij.; Sol. Morph. Mur., dr. j. Sit mist. Capt., oz. j. ter die.

7th. To-day, at 1 p.m., was hastily sent for, another fit having come on. On my arrival the paroxysm had terminated, and she was then sensible. From the accounts of the attendant, this attack had been of a milder character. Reported to have complained of some headache yesterday; bowels open; tongue moist; skin rather hot but not dry, and still complains of pain in the head. Venesection to six ounces, which induced syncope.

R. Pulv. Opii, gr. ij.; Calomel., gr. vj. Sit pulv. statim sumend. Sinapimi cruribus. Mistura omittatur. Ol. Ricini post horam.

7 p.m. Continued easy since last visit; no return of fits and has slept three hours.

8th. Slept well; bowels open; urine plentiful. Is in all respects better.

10th. Continues much the same, but does not sleep very well and complains of some beating at the heart.

Mist. cum Infus. Calumb. sumatur.

14th. Says she cannot sleep, and for some days has not slept three hours consecutively. Has pain over the os frontis, which is described as a dull headache. Action of heart on application of the stethoscope is excited, but no bruit can be heard. Pulse 80, of tolerable strength.

R. Tinct. Digitalis, gtt. xl.; Sol. Morph. Mur., dr. iiss.; Aquæ, oz. iv. Sit mist. Capt. quartem partam omni nocte

15th. Slept well last night. In all respects improving.

17th. Rapidly improves.

24th. Convalescent.

REMARKS.

There is not an affection more alarming, nor one in which promptness and energy are more imperatively demanded, than an attack of puerperal convulsions. Procrastination in our measures, and an imbecile line of treatment, are often attended with disastrous results; whilst a ready decision, and the bold employment of those means which, with the well informed, have now become indisputably established, can in a great majority of cases avert a mortal termination. Before this disease was so well understood as it now is, not more than one half or one third recovered. In the seventeenth and eighteenth centuries, it was regarded by the physicians of those times as a well-nigh always fatal disease. Hunter, Jacobs, and others affirmed that more than fifty per cent. invariably died, indeed, they considered it as one of the most fatal of complaints. Comparing such statements and the degree

of mortality with the present notions of the affection, and the ratio of deaths that now occur, under different pathological views and a more fearless mode of treatment, we are impressed with the complacent reflection that the progress of science, and the valuable truths arrived at by careful observation, have in this complaint been followed with the most valuable results, and that such have tended to the prolongation of human existence.

Puerperal convulsions usually occur during one or other of the stages of labour, or immediately after parturition. They may also come on at any period during the latter half of pregnancy; such, however, is far more rare than the former. The most frequent of all times is undoubtedly a little before the termination of the first stage, when the os uteri is becoming fully dilated. This affection may also take place at any period within the first twenty days after labour, but such is more uncommon, for after the uterus has expelled its contents, and so long a time as ten days or a fortnight elapsed since delivery, the supervention of the convulsive paroxysms is but seldom noticed. In the instance of this person it is seen that the first fit came on immediately before the os became fully expanded; and it is also worthy of remark, that five days after her delivery another fit came on, although there was no return of the paroxysms from the period of parturition to that time. With regard to the dilatation of the uterine orifice, I am aware some authors have affirmed that a fit will supervene when scarcely any signs of labour are present, and in a few minutes after such fit, not only will the parts have become sufficiently dilated, but the child be immediately born, owing to the morbid excess of muscular action. Such statements may be regarded as an exaggeration rather than as a simple declaration of facts, for it will generally, if not always, be observed, that where the fœtus is so precipitately expelled, the os had some time before been gradually becoming patulous.

It may here, too, be mentioned, that the affection is much more common in primiparous females, than in women who have previously borne children. Ann W. had never before been confined. In four cases which I have known, three were in the first confinement. Collins, in an account of thirty cases, says that twenty-nine were first births; and of thirty-six by Merriman, twenty-eight were first births. We can readily conceive that the first time nature accomplishes this process, her efforts will have a more severe effect upon the animal economy than when the parts have been previously distended, the impression made upon the nervous system give rise to greater excitation, and the mental disturbance which ranks amongst the acknowledged causes exert a more powerful influence upon the body.

Pathologists have found it difficult to determine which are really the remote and which are the proximate causes; indeed, on this head there exist much

ambiguity and difference of opinion. Amongst the remote causes, however, with those who endeavour to define certain conditions as such, irritation transmitted to the great nervous centres by means of the afferent spinal nerves, especially those proper to the uterus, which, from their morbid excitation produce the sequent train of phenomena at the base of the brain and in the spinal cord, may be enumerated as importantly entering into the causation. Irritation in any portion of the alimentary canal, particularly in its gastric course, preternatural vascularity in the colon, a diseased state of the liver, of the bladder, etc., have been considered as likely to induce the affection. There can be little doubt that a previously confined and irregular state of the bowels, the accumulation of scyballous and acrid matters, &c., will act as powerful predisponents. Morbid conditions existing in the nervous centres themselves, as well as from states operating upon the extremities of the incident nerves, might also be mentioned. There can be no doubt whatever that mental discomposure acts very importantly in the induction of the convulsive paroxysms. An anxious and depressed state of mind always exerts a deleterious influence upon the body, and renders the nervous system morbidly excitable, and where such obtains to a considerable extent, or has been long continued, it may readily be imagined that such would be apt to induce the results considered. In four cases which I have known, in three there was much mental disquietude. One was the lady of an officer in the army, whose husband died very suddenly about the period of her full time of pregnancy; labour came on, accompanied with very violent convulsions. The two others were unmarried females, and had both, for some time before, been very despondent. It has been stated by eminent obstetricians, whose experience in this disease is more ample, that it occurs far more frequently in illegitimate births than in the confinements of married women,—an assertion which is very likely to be correct, owing to the acute sense of shame in the former, the censure of their friends, and other gloomy reflections which have often considerable effect. The state of the air by some, especially the older physicians, has been deemed an essential element entering into the causation of puerperal convulsions. There can be little doubt that they are more common in summer than in winter, and when the air is surcharged with electricity; yet they are much more dependent upon more potent causes, and may occur at any season of the year, and under every variety of temperature. This case it is seen was in the month of February, and I well recollect it was a keen frosty night. Dr. Ramsbotham says that the affection is most usual when there is thunder in the air,—an assertion highly probable, and in this respect being analogous to what we know with regard to apoplexy, to which disease puerperal convulsions are very nearly allied.

Puerperal convulsions appear to be proximately caused by two distinct and opposite conditions of the vascular system,—viz., an over-distension, and a too great emptiness of the blood-vessels, because we know that the cerebral vessels being over-loaded in a patient of plethoric diathesis, by producing pressure on the brain, will give rise to the paroxysms; and also when there is sudden and considerable loss of blood, as in uterine hæmorrhage, because convulsions often precede the fatal issue, and they have been experimentally produced in the lower animals by sudden and copious venesection.

It is more difficult to account for their occurrence when exsanguination, than when plethora, is regarded as the cause. The manner in which the result is produced may probably be owing to the equilibrium of the circulation being lost by a sudden effusion of the vital fluid, when the walls of the vessels have not sufficiently accommodated themselves to the decreased volume of blood traversing their cavities; hence their propulsive power would become in some measure impaired, and thus congestion and pressure ensue. We know that the heart requires an exact volume of blood to be transmitted through its cavities during each systolic and diastolic action, and unless such volume be normal, its action will become altered, and this change of function of course exerts a commensurate effect throughout the vascular system. When therefore the column of blood is considerably decreased, the organ is not stimulated to its ordinary degree of contractile power, the vis a tergo is diminished, the propulsive functions of the larger vessels are also impaired, and congestion at the vascular extremities is thus engendered, whilst the whole system partakes of the debilitated condition, and thus superadds to the first cause.

There are two descriptions of patients, whose conformations are exactly opposed to one another, with whom the disease appears chiefly to prevail—the muscular, short-necked, apoplectic-looking person; and the thin, slender, nervous female, of highly-excitable temperament and hysterically inclined. Mr. Cole, of this place, not very long ago attended a young person of this description, who had the convulsions in the most alarming manner. These being admitted as the most correct views of the radical pathology,—viz., that pressure, however remotely induced, is produced in the nervous centres, yet *post-mortem* investigations have not satisfactorily elucidated such conclusions, because autopsies have been made where the patient has died of puerperal convulsions, and no organic changes have been observed to follow, or in any degree account for death, just as in cases of apoplexy, termed nervous or simple apoplexy. It seems rational to suppose that radical organic changes do exist in all cases, but in particular instances they are certainly so occult, as in the present state of our knowledge to elude detection.

The case now given was of the eclampsial kind, which, according to Burns, occurs in ninety-nine cases out of every hundred. Sauvages defines the genus Eclampsia as follows:—"Artuum vel musculorum plurimorum, spasmus clonicus acutus, cum sensuum obscuracione."

It must be granted, that between puerperal convulsions and apoplexy there is a striking similarity, and some consider the two affections strictly identical, but when carefully compared they are not so, neither in their phenomena during the paroxysm, nor in the effects which follow. In their causes they appear very nearly allied. Apoplexy differs from this species of convulsions because in that disease there is never such violent agitation of the voluntary muscular system, and because in the one paralysis very generally succeeds, whilst in the other it almost never follows. From epilepsy it differs, because puerperal convulsions rapidly succeed one another, while in epilepsy it is not the case. Again, there is no aura epileptica, and they seldom ever return during the remainder of life.

On reference to the above case, it is said that immediately preceding the fit, an intense pain in the head was experienced, according to the patient's own words, as if it were opening and shutting. Scintillæ, muscæ volitantes, or a fit of shivering, are often the premonitory symptoms. Occasionally there is an incoherent rambling of expression, but more generally little if any intimation is given. If the patient should, however, manifest any evidence of their supervention, as by complaining of a sense of weight in the head, or dizziness, accompanied with spasm in any part, we should at once be on our guard.

(To be continued.)

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

Reported by PETER HINCKES BIRD, formerly Resident Medical Officer.

CASE I.

FOREIGN BODY IN THE TRACHEA; TRACHEOTOMY: RECOVERY.

Mary Ann Priestly, aged 5 years, admitted into the Queen's Hospital on the afternoon of July 19th, 1847. It is stated that about half an hour ago she swallowed a glass bead; she was sucking it, and on taking an inspiration, it disappeared. When admitted she was without any urgent symptom, but complained of pain referred to just below the cricoid cartilage, and of "*something being in her throat*;" a probang was introduced into her stomach, and she was made to vomit, but without relief. On applying a stethoscope to the trachea, a foreign substance was heard to move up and down during the respirations, and on making a strong expiration, it seemed to strike against the rima glottidis. In the evening the pain shifted lower down, and to the right side, and on applying the stethoscope the body was not heard moving up and

down the trachea, but appeared impacted in the right bronchus. The vesicular murmur was less heard in the right than in the left lung. The inspiration also had a blowing character.

20th. She passed a pretty good night, and slept well, but on awakening was seized with a violent fit of coughing; she feels pretty well; appetite is good, and she eats heartily.

5, p.m. After a consultation, tracheotomy was decided upon, and performed in the following manner, by Mr. Knowles:—An incision was made, of about two inches extent, commencing just below the cricoid cartilage, and the soft parts covering the trachea were divided; this was followed by considerable venous hæmorrhage, and the thyroid gland projected from the upper part of the wound. The trachea was so small and so deep, that the operation for opening it was by no means easy; but after the hæmorrhage had ceased, it was done, and after two expirations the bead flew out with considerable velocity. The child bore the operation with remarkable *sans froid*. After waiting a short time until all bleeding had ceased, the edges of the wound were brought together by straps of adhesive plaster. The bead was composed of glass, was hollow, and narrowed and open at both ends. The child appeared much lowered by the operation; her face was pale, and pulse weak. There was towards the evening some mucous râle attending the respiration, but on applying the stethoscope it was found not to occupy the bronchi but the posterior nares.

On the 21st there was some slight croupy cough, attended with febrile symptoms, which were relieved by appropriate treatment. On the 22nd the air ceased to pass through the wound, and on the 29th she was convalescent.

CASE II.

REMARKABLE GUN-SHOT WOUND: RECOVERY.

John Smith, aged 29, boatman, was admitted into the Queen's Hospital, under the care of Mr. Knowles, on the morning of the 9th of August, 1847. He states that about half an hour ago he was stooping down to pick up a gun; the mouth of the barrel was pointed towards him and close to his chin; the lock of the gun caught against something, the gun went off, and discharged its contents in his neck. He was not stunned, nor did he lose much blood. The gun was charged with shot and paper wadding.

On admittance, his countenance was pale and towards the lower part smeared with powder. There was a large wound a little to the right of the median line just below the ramus of the jaw; it was uneven and lacerated, and would contain about four of the fingers, it was also much blackened by the powder. The wound extended backwards and a little inwards, below the ear, to midway between the ear and occipital protuberance, but below them, and terminated by an irregular triangular opening, of about one inch in extent, having everted edges, from which the charge had issued. There was fortunately no large artery wounded; the external carotid artery had a very narrow escape, and could be seen beating on the inner side of the wound. The wound was well probed, but there was no wadding or other foreign substance discovered.