Remarks on Convalescence after Natural Labour.
By Flerwood Churchill, M. D., Physician to the Western
Lying-in Hospital, Lecturer on Midwifery, &c.

It may be necessary to offer some apology for occupying the attention of the reader with a subject so common-place as recovery from natural labour, were it not universally acknowledged that mankind are most apt to overlook, that which is most constantly before them. The subject has not occupied very much of the attention of those who have published systematic works upon midwifery, although it is certainly worthy of it, for it is within every one's experience, to be kept in a state of great anxiety about the recovery of a patient, who passed through the process of parturition in the most favourable manner possible. Moreover it not unfrequently happens, that certain symptoms arise, the initiative apparently of some serious malady, and which yet disappear without active treatment, and are followed by no grave consequences.

Quite recently, the ordinary phenomena of the puerperal state have been fully discussed, and the appropriate management pointed out by my respected preceptor, Dr. Hamilton of



Edinburgh, in the second part of his Practical Observations,* which I did not receive until after the rough copy of this paper was written. I have consequently rescinded, or but slightly referred to, whatever has been so much more ably treated by the learned Professor; and I have confined myself to noticing the succession in which the changes subsequent to parturition occur, and the variations from the usual progress of convalescence, limiting my observations to such variations as are not the precursors of organic disease.

If we examine a female after delivery, and compare her state with what it was before, even during an interval of pain, we cannot fail to be struck with the great change which has taken place. The act of expelling the child and secundines, seems to be attended by a certain shock to the nervous system, producing far more marked effects upon the constitution, than could have been caused by the mere muscular exertion. skin becomes pale, flabby, and moist, the moisture having a peculiar odour; the muscles feel softer; the patient complains of exhaustion rather than fatigue; the organs of sense are unusually susceptible, there being more or less intolerance of light and sound, and a tendency to headach. The respiration is in some cases hurried, in others rather slow and deep, soon after delivery; the functions of the stomach are suspended; there is no appetite, but some thirst, and the action of the intestines is retarded. These symptoms are more or less observable in all cases, even the most favourable, and where no hemorrhage has occurred. If nothing interfere, the nervous system gradually recovers its tone, and in no respect is that restoration more manifest, than in its influence upon the various organic functions and secretions. The skin assumes a healthy look and feel; the appetite returns; and the bowels are evacuated naturally. The respiration resumes its accordance with the circulation;

[.] On the Ordinary Management of Women after Delivery, p. 1.

and so far the patient may be considered convalescent. There are some points, however, worthy of a somewhat more detailed examination, as for instance, the circulation, the state of the uterus, and mammary glands, &c. My data for the statements which are about to be made, are certain tables which have been accurately kept, at the Western Lying-in Hospital, by my very intelligent pupil, Mr. Gibbon.

If the pulse be counted just before delivery, but during an interval of pain, it will generally be found very frequent, almost always above 100, sometimes 140. If it be numbered an hour or so after delivery, it will be found to have fallen below the matural standard, say to 60; and if we examine again after ten or twelve hours, we shall find that reaction has taken place, and that the pulse is now quicker than when the patient is in health, but not so quick as it was just previous to delivery.

The amount of the primary vascular excitement, the degree of collapse, and the extent of the reaction, depend partly upon the character of the labour, partly upon the irritability of the patient's constitution, and partly upon causes which are often very obscure, and which it would be foreign to my purpose to investigate at present. But in almost all the cases I have on record, there was a decided relation between the three states; i. e. supposing the pulse of the patient to have been very high before the birth of the child, it generally fell very low immediately afterwards, and rose again proportionally in the course of a few hours; and vice versa, when the primary excitement was slight, the collapse and succeeding reaction were trivial. Variations from this, the ordinary course, I shall have occasion to notice by-and-by. A considerable acceleration of pulse, with rigors, is observed when the secretion of milk commences, but this gradually subsides, and the circulation becomes quiet and regular. All the observations I have been able to make, confirm the accuracy of WILLIAM HUNTER's remark, that no female, after delivery, can be considered safe, whose pulse is not under 100.

Immediately after delivery, the uterus contracting, may be felt at the lower part of the abdomen, about the size it was at the fifth and sixth month of pregnancy. It feels hard and firm, and is scarcely at all tender on pressure, except when the afterpains are severe. Its bulk is gradually diminished by successive contractions and, according to Dr. Hamilton, by absorption,* and about the eighth or ninth day, it is within the bony pelvis. The after pains occur in paroxysms with distinct intervals, just like labour pains; on the occurrence of each, the womb becomes hard, is tilted forward, and expels any clots or blood which may have been retained in its cavity.

From the period of delivery there is a constant discharge from the womb, lasting two, three, or four weeks, and even longer in delicate females. On the first day this appears to be pure blood, partly fluid and partly in clots; the second day it is much thinner, and paler, rather a secretion or an infiltration than a discharge from open vessels; on the third day it becomes more or less slimy, still paler in colour, and generally less in quantity: by the sixth or seventh day, the colour changes to a dirty yellow or greenish hue, after which it gradually becomes colourless, opaque, or transparent, and diminishes in quantity until it entirely ceases. It possesses a very peculiar odour, which is readily recognized in the atmosphere of the wards of a lying-in hospital. Dr. Lowder compared it to the smell of fish oil.

Before delivery, the mammary glands generally secrete a thin, yellowish fluid, very different from milk; but cases are not unfrequently met with, where proper milk is secreted in such abundance, as to enable the female to give suck to the child immediately after its birth; and for children so supplied, medicine has been found unnecessary. I have further remarked that such females generally suffer severely from after pains, each application of the child to the breast bringing on immediately a fresh paroxysm.

[·] See the Essay before quoted, p. 7.

The secretion of milk before delivery is not the ordinary occurrence, however; for many hours afterwards the mammary sympathy is not excited, but after an interval of from twentyfour to fifty hours some uneasiness is felt in the breasts, with occasional darting pains, and an augmentation of volume. yet milk is not produced, but the glandular substance feels hard and knotty, the areola is puffy, and the nipple prominent, as it were, erect. In the course of the next eight or ten hours, the size and weight of the breasts increase very much, and they If the child be applied, he will probably feel hard and tense. be able to obtain milk, but less freely than after the lapse of a short time, and a little more practice. The flow of milk affords great relief to the patient, it diminishes the local distress, lowers the pulse, and lessens the heat of skin, which characterize these few days of milk fever.

These are the principal phenomena which follow natural labour, with their successive changes. It now only remains to point out certain variations from this regular course, of sufficient magnitude to demand our attention. And first, of the shock inflicted upon the nervous system, and thence upon the system generally. I have already said, that I do not believe this to be the result of the muscular exertion merely, and whatever doubt of this being the fact may be entertained in the more favourable cases, none can exist as to the severer ones. A due estimate of the nervous shock is of great importance, for in almost every instance (when serious disease is not in question) the recovery of the patient is in inverse proportion to the amount of this disturbance. There are different degrees of suffering resulting from it, the more favourable cases exhibit very little, in others it is very marked, and in these we may observe (in addition to the ordinary symptoms already enumerated) a sunken countenance, laboured, hurried, or panting respiration, great depression, restlessness, small, quick, fluttering pulse; and I have very often observed that the proportion between the respiration and circulation is destroyed. In an

extreme case, if the constitution be feeble, the patient may sink in the course of a few hours, before inflammation has had time to set in, and if a post mortem examination be made, no lesion will be found sufficient to account for the death of the patient. In one such case, I found the uterus, ovaries, and vagina, all uninjured and free from disease, nor was there any lesion of any other organ. The patient had sunk, as I have described, within a few hours after delivery. But these are extreme cases, and fortunately not very common, being chiefly those in which the patient has been neglected, or when assistance has been too long deferred.

The length of time which may elapse before a patient arrives at the maximum of susceptibility to the nervous shock, varies much in different individuals, dependent probably upon constitutional peculiarities. Labour may go on very long with strong women, and yet the shock be very moderate; with others, on the contrary, a few hours of protracted natural labour involves as much danger as an operation. A third class of patients cause great anxiety to the medical attendant, they go on for a long time so well, and so free from constitutional suffering, that no mischief is anticipated, yet beyond a certain point, their power of endurance is exhausted, and they "run down" with great rapidity.

There are many cases, however, where the shock received, though far from being as severe as in some which have been described, is yet quite sufficiently so to excite uneasiness and even alarm in the medical attendant. Instead of the proportionate collapse and re-action which ought to succeed delivery, we find the patient exhausted, panting, and much distressed, with a quick pulse. Re-action is long before it occurs, or it may take place imperfectly or excessively, and the patient generally experiences an unusual degree of weakness, with a tedious convalescence. It would be out of place to dwell much upon treatment, considering thee xcellent directions given by Dr. Hamilton, but I may be allowed to remark en passant, that

the most obvious remedy for this state of nervous depression is not the best. The exhibition of stimulants (as wine, brandy, &c.) to any considerable extent aggravates the condition of the patient, instead of relieving the collapse, and in very moderate quantity only are they admissible. A good dose of opium, or small doses repeated pretty often, will afford more relief; it not only gives the patient a chance of sleep, the best restorative of all, but even if it fail in this, the system will be quieted, the respiration rendered more equable, the pulse slower and more natural, and the balance between these two systems restored. After a time, it may be necessary to give some tonic medicine, and I think musk will be found one of the most useful. The diet of the patient must be carefully adapted to the enfeebled condition of the digestive powers.

To return.-The second point mentioned was the state of the circulation, with the alternation of excitement, collapse, and reaction. I have just stated one variation from this succession, in the case of a severe nervous shock, when the pulse may contime rapid after delivery, instead of falling. I have often remarked an undue frequency of pulse when the after-pains are violent, and as the uterus is also somewhat tender on pressure in such cases, it requires tact and care to distinguish between this state and the commencement of puerperal fever. same observation will apply to the quickening of the circulation which takes place when lactation commences, and which, in addition, is accompanied by rigors. A careful estimate of all the symptoms in either case will generally elucidate the nature of the excitement, and our observation of the diminution instead of the increase of vascular action will decide the question. Again, in cases where a coagulum is retained in the uterus. the pulse is quickened. I had noticed this repeatedly before I could discover the cause, but having found it subside immediately on the discharge of clots, I have no doubt that this was the cause.

Lastly, the pulse will be greatly accelerated, if the patient suffer from diarrhosa or gastric disturbance; and as it is not

very easy to foresee the issue of such on attack, the utmost watchfulness will be required. The diagnosis may be very obscure, and it may be necessary to adopt certain measures rather suited to the attack we fear, than to the disturbance from which the patient is suffering. Along with the soothing and astringent medicines adapted to the state of the bowels, it will not be amiss to administer small doses of blue pill or calomel, in combination with opium.

With regard to the variations from the ordinary size of the womb and its gradual decrease; I have found sometimes, on the fourth or fifth day, that its bulk had increased, and that it felt less firm than previously; this, combined with the quick pulse, has made me fear an attack of hysteritis, nor was this fear diminished by the uncomfortable sensations of the patient, or by the fact, that in some cases the lochia had suddenly diminished in quantity. Upon applying fomentations of hot water or turpentine to the abdomen, a quantity of coagula were discharged, and the patient obtained speedy relief. Purgative enemata also favour the expulsion of the clots, and in such cases have been given with great benefit.

It has been already mentioned, that the uterus is not free from tenderness in those cases where the after-pains are severe, and if it be rudely pressed, the outery of the patient may mislead us. It will be observed, however, that this tenderness is greatest during each uterine contraction, and that as these subside, it diminishes. Fomentations to the abdomen will generally mitigate this sensibility, but if the after-pains be severe, and the tenderness considerable, a full dose of laudanum, followed by an aromatic purgative, will probably relieve both.

Perhaps no phenomena in the progress of convalescence excite more alarm in the patient's mind, or show more the value of minute observation on the part of the accoucheur, than the variations in the quantity, quality, and odour of the lochia, which sometimes occur. The patient will hardly be persuaded that such are not the unfailing indicia of organic disease. Yet very remarkable changes do occur without any lesion of the

uterus or vagina. In some cases, the lochia after decreasing for some time, are suddenly discharged in double quantity, and of a much brighter colour, but without coagula. This generally happens when the patient is permitted to sit up too soon. Or it may happen at a later period, in consequence of walking about too much. A little extra rest will, however, suffice to restore the patient to her former state.

Again, the os uteri is sometimes obstructed by a coagulum, and the lochia are greatly diminished, or perhaps entirely retained, until the expulsion of the clot affords an exit to the accumulation.

It has been already stated, that the lochia generally continue three or four weeks, according to the constitution of the patient, but sometimes for six or eight, and then terminate in persistent uterine leucorrhoea. This will best be remedied by counter-irritation to the sacrum, and the internal exhibition of copaiba, iron, or ergot of rye.

In connexion with this subject, I may just mention, that the menses frequently return the first or second period after delivery, without again recurring during lactation. This would appear to be most common after the birth of first children.

Again, the quantity of the lochia being unaffected, the colour may excite alarm; instead of the transition from red, to a pale red, yellowish, or greenish colour, the lochia are sometimes of a dark brown, and perhaps more tenacious than usual, or they may suddenly become perfectly colourless, (resembling the discharge called whites,) but in neither case attended with inconvenience or danger. It is very necessary to be on our guard, when the lochia become of a redder colour than, from the period which has elapsed after delivery, they ought to be, as this change may be the precursor of secondary hemorrhage. The patient should be confined to the horizontal position, and clothed very lightly.

I have met with two or three instances, where the lochia had a very offensive odour, without any other evidence of dis-

order, local or general. There was neither hysteritis, nor sloughing of the vagina. The patients recovered perfectly. In such cases, it is advisable to wash out the vagina once or twice a day with warm water, to prevent any irritation from the offensive discharge.

Variations in the period of the secretion of milk, are of no moment; if the vascular action be excessive, it must be moderated by antiphlogistic remedies; such as tartar emetic, fomentations, &c., and by the frequent application of the child. If, as in some very rare cases, no secretion should take place, the child will require a wet nurse, but the mother will not suffer.

Many more variations from the ordinary course of convalescence after natural labour might be added, but I have been rather anxious to confine myself to those which are the most marked. I am far from presuming to suppose, that these changes have not been noticed by all who have seen much practice, but for the younger members of the profession these observations may not be altogether useless. I have expressly omitted the details of the management of the puerperal state, because, I can refer the reader to Dr. Hamilton's work, where all I could say is stated more lucidly, and on far better authority.