Practical Observations on the Uterine Hemorrhage, with Remarks on the Management of the Placenta. By JOHN BURNS, Lecturer on Midwifery, and Member of the Faculty of Physicians and Surgeons in Glasgow. London, 1807. 8vo. pp. 199.

THERE is nothing, perhaps, very new or original in this little work of Mr Burns, which forms a very natural sequel to his essay on abortion, already reviewed in this Journal. Yet it is one of considerable merit and interest, on a subject of undoubted importance,—a subject which, in all its details, ought to be constantly and intimately familiar to every general practitioner. For here, there is often no time for delay or hesitation; prompt and decisive measures, such as experience and observation have already sanctioned and determined as rules of practice, may save, while a single error, whether of omission or commission, may, in the case of uterine hemorrhage, prove instantly destructive to the patient. This, then, is the peculiar merit of Mr Burns, that his discourse is truly practical, that he has kept steadily to his subject, without distracting his reader's attention by any idle speculations or foreign discussions, while, with a happy perspicuity, he explains, in a persuasive and instructive manner, the most efficient and approved practice in the different cases. Nothing, in our opinion, is more praiseworthy in a medical writer, than this, of following out a few plain and general principles in a practical discourse, to the exclusion of the too common ornaments of fine spun theories, which have no other effect than to obscure the subject. In his essay on abortion, Mr Burns has fallen into this error, by the engraftment of hypothesis on observation. Our decided preference is given to the observations now before us, because they are so little encumbered by hypothetical opinions.

Uterine hemorrhage, occurring in the advanced months of gestation, implies a rupture of vessels, and separation of a part of the membranes, or of the placenta from the uterine surface. The flooding, in quantity and duration, corresponds for the most part to the extent of separation. It is greatest and most dangerous when the placenta has been separated, in those cases, more especially, where it has been attached to the cervix uteri. The hemorrhage may be so profuse as to occasion the death of the mother before assistance can be procured; or, if the patient is saved, it is by the induction of faintness or syncope, by such

a diminished force of circulation as allows formation of coagula, and temporary suppression of the bleeding; or, by the contraction of the uterus, labour comes on, and the fœtus is expelled. Having stated and commented on these general and leading principles, Mr Burns next discusses the operation of the remote causes of uterine hemorrhage, and then considers the effects of the profuse or continued loss of blood on the system. If expulsion have not taken place, the patient, by a continuance of the hemorrhage, or repetition of the paroxysms, becomes exhausted, feeble, and irritable, liable to hysterical and convulsive affections, syncope, and general derangement of all the functions, till the debility becomes so great, that no care can recruit the enfeebled system, nor excite the muscular contraction of the uterus, by which alone the mother can be saved, so that, says our author, "we may deliver the child, but the womb will not contract." In forming a prognosis, these effects of the flooding are to be kept steadily in view. In most cases of sudden and profuse hemorrhage, occurring in the advanced stage of gestation, a cure is only to be obtained by expulsion or delivery, for in such, it may be presumed, that there is a considerable separation of the placenta, and that the hemorrhage, though suppressed, will yet certainly return. But, in more moderate attacks, where a portion of the decidua, or a little of the margin only of the placenta, has been detached, the hemorrhage may sometimes be completely and permanently checked. Every repetition, however, even of a moderate hemorrhage, diminishes the hope of a successful gestation. And, in every case, the continuance or repetition of flooding, may require manual interference to insure the safety of the patient. Our opinion of danger or safety will also be formed from a consideration of the previous state of her constitution, of the actual symptoms induced by the hemorrhage, and on the quantity and velocity of the discharge.

The plan adopted by our author in the practical part of his observations, is to consider, first, the treatment of uterine hemorrhage occurring in the three last months of gestation, then the treatment of hemorrhage occurring during labour, and, successively, of flooding after delivery, and of hemorrhage after the expulsion of the placenta.

Our first practical indication, in a case of flooding, is immediately to restrain the violence of the discharge, "after which we can take such measures as the nature of the case may demand, either for preserving gestation, or for hastening the expulsion of the child." For restraining the violence of the discharge, the patient is laid in a horizontal posture, and kept in the most perfect state of quietness and rest during the subsequent treatment. If the flooding appears to have arisen from repletion,

and

and to be kept up by over-action of the heart and vessels; bloodletting will sometimes be useful and necessary. But certainly, in by far the greater number of cases, this remedy is either inapplicable, or comes too late. Our great remedy, for moderating the force of circulation in floodings, is the application of cold. On the management of this remedy, Mr Burns furnishes some judicious observations. Where the circulation is already languid, and the heat has fallen below the natural standard, the vigorous application of cold, it is obvious, would sink the system too much. And, as our author justly observes, there are even cases where it may be necessary, from the coldness and weakness of the patient, to deviate from the general rule, and to apply warm cloths to the hands, feet, and stomach. Where these remedies have been ineffectual, or where, from the state of the patient, they are inadmissible, we have a pretty certain resource, in most cases, in the plug. Plugging the vagina with a soft handkerchief, gives us a great command over the hemorrhage. "The advantage," says Mr Burns, "is so great and speedy, that I am surprised that it ever should be neglected." The plug is especially applicable on sudden emergencies in the early attacks of hemorrhage, when the os uteri is yet firm and undilated, and manual interference unnecessary or improper. But, under other circumstances, the practitioner must be on his guard, for the hemorrhage may be only concealed by the plug, while the bleeding is going on within the relaxed and torpid uterus. If we have succeeded in restraining uterine hemorrhage, our object then is to prevent its recurrence. This also is best done by moderating circulation, and keeping down the action of the heart and arteries. Rest, light mild diet, cool and free air, are therefore to be continued. And where the pulse is sharp, throbbing, and frequent, the digitalis is much recommended by Mr Burns. The bowels are to be kept open, and every irritation removed. The effects of the preceding hemorrhage on the system are, at the same time, to be attended to. The chief of these are faintings, complete syncope, universal coldness, vomiting, and hysterical affections, the treatment of which is succinctly described by our author.

In some cases the hemorrhage may be permanently suppressed, the action of gestation continued, and the woman be happily conducted to her full time. But if the placenta have been separated to any extent, if placed over the orificium uteri, if the flooding have been profuse or repeated, the action of gestation is for the most part impaired, and a tendency to expulsion brought on. "But before the uterine contraction can be fully excited, or become effective, the woman may perish, or the uterus be so enfeebled as to render expulsion impossible." By

timely delivery, then, we are to anticipate these moments of extreme danger. "We must not," to use the language of our author, "we must not witness many and repeated attacks of hemorrhage, sinking the strength, bleaching the lips and tongue, producing repeated fainting fits, and bringing life itself into extreme danger." Nor are we forcibly to open the os uteri in the commencement of flooding. But when the os uteri is already somewhat opened, if the flooding continues, and threatens the safety of the mother, we must dilate and deliver, if expulsion can no longer be trusted to the slower efforts of nature. Unless in the most extreme case, Mr Burns advises that no attempt whatever be made to force the os uteri with the finger, till there is a natural disposition to open.

"As long as the os uteri is firm and unyielding; as long as there is no tendency to open, no attempt to establish contraction, it is perfectly safe to trust to the plug, rest, and cold. Did I not know the danger of establishing positive rules, I would say, that as long as the os uteri is firm, and has no disposition to open, the patient can be in little risk, if we understand the use of the plug. We may even plug the os uteri itself, which will excite contraction. But if the patient be neglected, then, I grant, that long before a tendency to labour or contraction be induced, she may perish. I am not, however, considering what may happen in the hands of a negligent practitioner, for of this there would be no end, but what ought to be the result of diligence and care."—"It is evident, that when the uterus has a disposition to contract, and the os uteri to open, delivery must be much safer and easier, than when it is still inert, and the os uteri hard.

"We may, with confidence, trust to the plug, until these desirable effects be produced; and, in some instances, we shall find, that by the plug alone we may secure the patient: the contraction may become brisk, if we have prevented much loss of blood, and expulsion may naturally take place. Who would, in those circumstances, propose to turn the child, and deliver? Who would not prefer the operation of nature, to that of the accoucheur? To determine in any individual case, whether this shall take place, or whether delivery must be resorted to, will require the deliberation of the practitioner. If he has used the plug early and effectually, and the pains have become brisk, he has good reason to expect natural expulsion, and the labour must be conducted on the general principles of midwifery. But if the uterus have been enfeebled by loss of blood; if the pains are indefinite; if they have done little more than just to open the os uteri, and have no disposition to increase, then he is not justified in expecting that expulsion shall be naturally and safely accomplished, and he ought to deliver."

The true value of the plug will now be obvious. It is, in truth, the tourniquet of the accoucheur, with which he saves his patient from instant danger, that he may wait till circumstances shall enable him safely to use those other means which the nature of the case shall require.

The remaining observations of Mr Burns, on the treatment of hemorrhage occurring during labour, after delivery, and after the expulsion of the placenta, and his directions for the management of the placenta, are equally copious and instructive with those of which we have given this short account. They appear all deducible from the soundest principles of pathology, and agreeable, we believe, to the experience of the most enlightened practitioners.

Practical Observations on the Uterine Hæmorrhage: with Remarks on the Management of the Placenta. By JOHN BURNS, Lecturer on Midwifery, and Member of the Faculty of Physicians and Surgeons in Glasgow.

IT is somewhat surprising we should have been so long without any tract devoted exclusively to this important subject. Mr. Burns begins with a short description of the connection between the uterus and ovum, and the causes of hæmorrhage during gestation; the manner in which Nature endeavours to relieve them; the difficul-

culty which attends that attempt; and the necessary consequence of frequent returns of the complaint.

The author next enters, with more precision, into the causes of uterine hæmorrhage under gestation. These he considers, as imputable to external violence, producing a separation of part of the ovum; to fatigue, or over exertion; which, by their effects on the parts, or on the general circulation, may produce such an effect; straining the abdominal muscles from any cause; a preternatural degree of action in the vessels going to the placenta, or decidua arising from general plethora, or some peculiarity in the state of the parts; a want of correspondence between the action of the uterus and ovum; spasmodic action of the os uteri; any cause which may interrupt the progress of gestation, or the formation of that jelly which ought to be secreted before the os uteri — in some cases, the author has observed a change in the structure of the placenta near the separated part; lastly, the insertion of the placenta over the os uteri. This last he considers with other practitioners, as the most common of all the causes producing uterine hæmorrhage during gestation.

The next object attended to, is the *effect* of Uterine Hæmorrhage, which leads to a consideration of the prognosis.

As the reputation of the practitioner depends often more on this last, than even on his success, we shall transcribe this part of the work, as a specimen of the Author's style.

"We may lay it down as a general observation, that few cases of profuse hæmorrhage, occurring in an advanced stage of gestation, can be cured without delivery or the expulsion of the child. For when the discharge is copious or obstinate, the placenta is generally separated, sometimes to a very considerable extent, and a re-union, without which the woman can never be secure against another attack, can rarely be expected. If the placenta present, the hæmorrhage, although suspended, will yet to a certainty return, and few will survive if the child be not delivered.

"But in those cases where only a portion of the decidua, or a little bit of the margin of the placenta, has been detached, and the communicating vessels opened, either by a state of over action in the vascular system, or by too much blood in the vessels, or by some mechanical exertion; then, if proper care be taken, the hemorrhage may be completely and permanently checked; or if it should return, it may be kept so much under, or may consist so much of watery discharge from the glands about the os uteri, as neither to interfere with gestation, nor injure the constitution; yet it is to be recollected, that even these cases of flooding may sometimes proceed to a dangerous degree, requiring very active and decided means to be used; and in no case can the patient be considered as safe, unless the utmost care and attention be paid to her conduct.

"It would thus appear, that some hemorrhages almost inevitably end either in the delivery of the child, or the death of the

parent; whilst others may be checked or moderated without an operation. A precise diagnostic line, liable to no exceptions, cannot be drawn betwixt those cases; and, therefore, whilst we believe that rapid and profuse hemorrhagies, which indicate the rupture of large vessels, can seldom be permanently checked, we still, provided the placenta do not present, are not altogether without hopes of that termination which is more desirable for the mother, and safer for the child, than premature delivery. In slighter cases, our hope is joined with some degree of confidence.

" A second attack, especially if it follow soon after the first, and from a slight cause, greatly diminishes the hope of carrying the woman to a happy conclusion without manual interference.

" In forming our opinion respecting the immediate danger of the patient, we must consider her habit of body, and the previous state of her constitution. We must attend to the state of the pulse, connecting that in our mind with the quantity and rapidity of the discharge.

" A feeble pulse, with a hæmorrhage, moderate in regard to quantity and velocity, will, if the patient have been previously in good health, generally be found to depend on some cause, the continuance of which is only temporary.

" But when the weakness of the pulse proceeds from profuse or repeated hæmorrhage, then, although it may sometimes be rendered still more feeble by oppression, or feeling of sinking at the stomach; yet, when this is relieved, it does not become firm. It is easily compressed, and easily stopped by motion; or, sometimes, even by raising the head.

" If the paroxysm is to prove fatal, the debility increases—the pulse flutters—the whole body becomes cold and clammy—the breathing is performed with a sigh—and syncope closes the scene.

" If irritation be conjoined with hæmorrhage, then the pulse is sharper, and, although death be near, it is felt more distinctly than when irritation is absent.

" The termination in this case is often more sudden than a person, unacquainted with the effect of pain or irritation on the pulse, would suppose. For when the pulsation is distinct, and even apparently somewhat firm, a slight increase of the discharge, or sometimes an exertion without discharge, speedily stops it, the heat departs, and the patient never gets the better of the attack.

" We must likewise remember, that a discharge, which takes place gradually, can be better sustained than a smaller quantity, which flows more rapidly. For the vessels in the former case come to be accustomed to the change, and are able more easily to accommodate themselves to the decreased quantity. But when blood is lost rapidly, then very speedy and universal contraction is required in the vascular system, in order that it may adjust itself to its contents, and this is always a debilitating process. The difference too betwixt the former and the present condition of the body, is rapidly produced. and has the same bad effect as if we

were instantly to put a free liver upon a very low and abstemious diet.

" In all cases of flooding, we find that during the paroxysm, the pulse flags, and the person becomes faint. Complete syncope may even take place, but this in many cases is more dependent on sickness or oppression at the stomach, than on direct loss of blood. In delicate and irritable habits, the number of fainting fits may be great, but unless the patient be much exhausted, we generally find that the pulse returns, and the strength recruits. The prognosis here must depend greatly on the quantity and velocity of the discharge; for it may happen, that the first attack of hæmorrhage may produce a syncope, from which the patient is never to recover."

Having thus explained the causes, effects, general symptoms, and probable event of Uterine Hæmorrhage, Mr. Burns enters on the Treatment. In this, he is as minute as the nature of the subject requires, but not more diffuse. To enumerate therefore, all contingencies which the student is taught to expect, and all the remedies recommended under each, would be to transcribe the whole. Such means of relief, as depend on manual assistance, are reserved for the succeeding chapter, " On Delivery." This comprehends all the circumstances under which Delivery should be prematurely attempted; after which, the author describes the effects of the presentation of the placenta at the period of parturition, and the manner in which the practitioner should conduct himself under such an event.

A chapter follows of Hæmorrhage during Labour, and another on the same event after Delivery, and after the expulsion of the Placenta; and lastly, on the Management of the Placenta. These concluding chapters necessarily embrace every part of midwifery which is any way connected with the subject. All the directions given by the author are blended with those cautions, which cannot be too often impressed on young practitioners, and with that decision, which the nature of the case will always demand.

This work, though containing but little novelty, may be considered as a very valuable practical epitome of all that is required of the practitioner, for the relief of uterine hæmorrhage during gestation or parturition.