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Remarks on Uterine Hemorrhage, and the beneficial effects of Mechanical Irritation as a remedy. By SAMUEL ROCKWELL, M.D.

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THE observations which I shall make upon this disorder, will be principally confined to that excessive discharge of blood from the uterine vessels, which is threatening to life, either immediately, or by inducing a dangerous infirmity. This takes place—

1st. After delivery in child birth.

2d. From abortion in the early periods of pregnancy.

3d. In the advanced state of pregnancy,—previous to, or attendant upon labour.

4th. In excessive Menstruation.

Three principal indications or intentions of cure, seem to have been regarded by most writers upon uterine hemorrhage. The first, and most important, is to excite contraction. This contraction I understand to be, not so much of the blood-vessels themselves, as of the size and capacity of the womb, whereby the diameters of the vessels are lessened, and their mouths closed by the corrugations of the internal surface of the uterus.

The second intention of cure, is to promote the formation of coagula, by which the mouths of the bleeding vessels are plugged up. It has accordingly been supposed, that remedies

which will answer both these intentions at the same time, are best adapted to stop the hemorrhage. That this last intention is founded upon erroneous principles, and has been the occasion of much error in practice, I shall attempt to prove. In all cases of hemorrhage, in the external parts of the body, the manner in which coagula operate in suppressing it, is apparent to the senses. This we know to be by such a pressure, as to form a close adhesion to the mouths of the open vessels. Thus in a wound, the divided parts are distended, by the accumulation of the coagulum, till a strong and permanent resistance produces that pressure, by which a close adhesion is formed upon the mouths of the open vessels, and the bleeding stops. So likewise in a bleeding at the nose, the firm resistance of the cavity, produces a constant and steady pressure upon the coagulum, and stops the hemorrhage. But the different, and peculiar organization of the uterus, is such that no dependence can be placed upon that firm, constant, and uniform pressure upon the coagulum, which is necessary to form such an adhesion. Besides, it will be easily understood, that if this contractile force of the uterus does exist, or can be excited, it would be still more effectual in checking the hemorrhage, if the coagulum were out of the way, and the womb suffered to contract to its natural state; which would almost always happen when the contractile force is sufficient to stop the hemorrhage, by pressure upon the coagulum, if it were not prevented by the bulk of this extraneous substance. If the womb is in a flaccid state, the coagula are floating in the fluid part of the blood, and can have no more effect in checking the hemorrhage, than they would have in a bleeding of the stomach, intestines, or bladder. I have said, that no dependence can be placed upon a continued pressure of the uterus upon the coagulum. The natural state of the uterus, except in the process of gestation, is a complete contraction; hence there is a natural, or (if I may be allowed the phrase) an instinctive effort to expel from its cavity, all foreign substances, except a living fœtus. This effort is made, not by a steady uniform contraction, but by alternate contraction and relaxation of its muscular fibres, or labour pains. Thus, when a dead fœtus, placenta, or coagulum is in the womb, it is seldom that any great length of time elapses, before this effort is excited, and in the relaxation which takes place, in the intervals of pain, the pressure upon the coagulum, &c. is removed, and the hemorrhage returns. It sometimes happens, that the placenta is retained many days after delivery, without producing hemorrhage; but the contrary so often happens, and flooding and death have so frequently been the consequence of

this retention, that it is justly considered an unsafe state. In the same manner, clots of blood may remain in the uterus for a considerable time, and the hemorrhage at the same time be checked. But this fact furnishes no stronger evidence that the hemorrhage is stopped by the coagula, than by the placenta. Both these substances are frequently exciting causes of hemorrhage. The principal reason why the retention of clots of blood is less dangerous than that of portions of placenta, is, that the former are generally more easily discharged by the efforts of nature than the latter. In what manner a hemorrhage, which has been suppressed for a time, is suddenly and powerfully excited, by even a very small portion of placenta, or any other extraneous substance, I shall not undertake to explain. The fact will not be disputed.

The third intention of cure, is the removal from the uterus of extraneous, offending substances. But as this intention interferes with the last mentioned, that of plugging up the vessels by coagula, it has not been regarded with the importance it deserves.

1st. Flooding after delivery in child-birth.

It is well known that upon the separation of the placenta from the uterus, after delivery, more or less blood is always discharged. But if the separation is effected in the manner which nature has provided, viz. by the gradual contraction of the uterus, this discharge is seldom so great as to be injurious. But it not unfrequently happens, either from the officiousness of art, from the great exhaustion of strength in the preceding labour, or from some other cause, that the placenta is partially or altogether torn from the uterus, previous to its contraction, and a violent hemorrhage ensues: and this happens, whether the placenta be extracted from the uterus or not. So long as the uterus remains in a flaccid, uncontracted state, the hemorrhage will be likely to continue. The obvious indication in this situation, is to excite this contraction. To effect this, various remedies are recommended. If the placenta is still retained, the most important remedy is to introduce the hand into the uterus, and to continue it there till a contraction is felt, before any attempt is made to extract the placenta. Pressure upon the abdomen, brisk friction, cold applications externally, and introduced into the vagina, are also recommended, and in many cases may be usefully employed.

But in the flooding which takes place, after the placenta is extracted, some difference of opinion exists amongst medical writers. Mr. Burns, under this head page 131, remarks—"Whenever hemorrhage takes place to such an extent as to endanger the patient, then we must interfere more actively; and I need not

attempt to prove, that the only security consists in uterine contraction. This is to be excited by the application of cold, and by the introduction of the hand, not simply to extract the coagula, but to stimulate the uterus, and rather make it expel them. When the hemorrhage proceeds from an interruption of the process of restoration, our principal resource consists in exciting the contraction of the womb, by the use of clysters, by friction on the abdomen, by injecting cold and astringent fluids into the womb, by the exhibition of a gentle emetic, and by throwing cold water from a syringe upon the abdomen when the womb is expelling the coagulum. We also check the hemorrhage and save blood by the prompt application of the plug."

Van Swieten directs "That if a too great evacuation after delivery, occasioned by the lumps of clotted blood retained in the womb, should continue, these are to be taken out by the hand with caution." And in section 1321,—“If such a lump should stop up the orifice of the womb, and the flaccid womb should not contract itself, the secret hemorrhage continues, and the whole cavity of the womb is filled with clotted blood, so that the lying-in woman is seized with a violent syncope. The only remedy then, is, by immediately thrusting the hand into the cavity of the womb, to pull out the clotted blood, so that the womb may be able to contract itself and stop the open vessels.”

Doctor Denman, page 147, remarks—“After the exclusion of the placenta, on the application of the hand to the abdomen, it is sometimes clear from the volume of the uterus, though contracted, that there are large coagula contained in its cavity. We have been directed, by gentle dilatation of the os uteri, to give them an opportunity of coming away, or even introduce the hand for this purpose; as by their continuance, they were supposed to keep up the distention of the uterus, and to occasion a continuance of the hemorrhage, as well as other mischief. Of any advantage, said to be derived from this practice, I am very doubtful, or whether it may not be suspected to renew or increase, rather than to suppress the hemorrhage. I have never attempted it, nor even troubled myself with the state of the uterus, unless it was inverted, after the placenta was brought away, but have left whatever coagula it contained, to be expelled by its own action.”

Here, if I mistake not, is a striking example of error in practice, from the false theory of plugging up the vessels by coagula.

That manual assistance, both with the intention of exciting contraction and removing coagula, is of very great importance, not only in the flaccid state of the uterus, in which it is advised by Van Swieten, Burns, and others, but also in very different circumstances of uterine hemorrhage, and circumstances in which no writer, that I have seen, has proposed it, I am fully convinced. The following cases, selected from many others which I have witnessed will be in corroboration of this opinion.

About thirty-four years ago, a case came under my direction which was to me very interesting. An amiable woman, a relative and an intimate friend, after being delivered by a midwife of her third child, was attended with a most alarming hemorrhage. Several reputable and experienced physicians were consulted. The usual remedies were assiduously employed, particularly rest in a horizontal posture with the head low, cold and astringent applications to the abdomen, vulva, and loins; and astringents internally, but all to no purpose. The discharge continued for two or three days, the pulse became extremely feeble, with great prostration of strength, and extreme faintness. It was suggested by some one present, that a part of the after-birth might have been retained. The midwife who attended her was positive that it came away entire. The patient, was however, examined by another midwife, who reported "that no part of the placenta remained behind; that she extracted some small clots (either from the vagina or uterus,) and placed the womb in a proper position, and put all matters *to rights*." To our surprise, and great joy, the discharge immediately subsided, and did not return, and the woman recovered.

In reflecting upon this case it occurred to my mind, that the suppression of the hemorrhage could not have been effected, merely by the removal of a small quantity of clotted blood, but that some part of the effects, at least, were to be attributed to the contraction of the uterus, excited by the examination and handling of the parts. And I then resolved, that in all cases of flooding, from whatever supposed cause, which should not readily subside by the usual remedies, I would, if practicable, examine my patient. This resolution I have ever since observed, and am confident in the belief, that, with the double intention of removing extraneous substances from the uterus, and by exciting its contraction by gentle irritation, principally at the os uteri, I have succeeded in suppressing hemorrhage more effectually, than by any other remedies which I could have employed.

I was consulted several years ago by a neighbouring physician, who informed me that he delivered his patient six hours

previous to my seeing her. She was flooding profusely, and attended with severe after pains, and great faintness. He had used astringents, cold applications, and the other usual remedies, without any abatement of the discharge. I advised him to extract the coagula from the uterus, and at the same time to gently irritate the internal orifice, and told him, he would in that way, cure his patient. He afterwards informed me, that he extracted half a pot full, as he expressed it, of coagulated blood; his patient was immediately relieved from her pains, and the discharge reduced to its usual and natural state.

Mrs. C——, after a natural delivery, was attended with no unfavourable symptoms for thirty-six hours. She was then suddenly attacked with severe pains, extreme tenderness to the touch about the region of the uterus, cold chills and fever, with a copious hemorrhage. I extracted a considerable quantity of coagula from the uterus. The pains, soreness, fever, and hemorrhage were immediately relieved.

Many similar cases might be added. I would observe generally, that after extracting the placenta agreeably to the rules laid down by most modern writers, I usually remove with my hand the coagulated blood from the uterus; and if the womb is not contracted, I gently irritate the internal orifice for a short time, in addition to what is necessary for the removal of the coagula. To effect these purposes, it is seldom necessary to introduce the whole hand. A part or all of the fingers, are sufficient unless in cases of uncommon flaccidity and profuse hemorrhage.* Should a feeble pulse, faintness or other symptoms, give suspicion of too great a loss of blood, whether discharged from the vagina or not, the patient is again examined, and the same process of removing coagula, and irritation repeated, if found necessary. This may also be necessary, even several hours after the delivery, should the hemorrhage continue, or return after being checked. The after-pains which usually accompany the hemorrhage, are convincing evidence that coagula are present in the uterus as the exciting cause.

As the practice of extracting coagula from the uterus, and exciting its contraction by manual assistance, is so seldom proposed by writers upon uterine hemorrhage, some further

* A respectable Physician of my acquaintance who has full confidence in mechanical irritation as a remedy for uterine hemorrhage, informed me, that he carried with him a smooth piece of alum, of a convenient form, which he used instead of his fingers, to irritate the os uteri, in cases of great flaccidity, when the contraction was not readily excited by the fingers.

considerations of the principle by which it is supported, will be necessary.

Mr. Burns remarks, "the retention of a small portion of the placenta, which has firmly adhered to the uterus, is also a cause of hemorrhage, and the discharge may be renewed for many days, until the portion be expelled. In this case, if by the introduction of the finger we can feel any thing within the uterus, it should be carefully extracted without using much force or irritation, lest we inflame the womb. It is more advisable to plug the vagina, and even the os uteri, so as to confine the blood and excite the uterine contraction." Plugging the vagina, and especially the os uteri, I should judge much more likely to excite inflammation, than careful and repeated irritation of the os uteri, and altogether less efficacious.

Again he observes,—“It may also happen, that from some agitation of mind or morbid state of body, the uterus may not go regularly on in its process of restoration to the unimpregnated state. In this case, the cavity may be filled with blood, which forms a coagulum, and is expelled with fluid discharge. These symptoms very much resemble those produced by a retention of part of the placenta, and cannot easily be with certainty distinguished from them.”

Here again, after recommending friction, cold applications, astringents, &c. his favourite remedy, plugging, is prescribed. But I have great confidence in asserting, that in this case, the hemorrhage may be easily and certainly suppressed, by extracting the clots by the hand. There is no adhesion as is sometimes the case, while a part of the placenta is retained. The clot may readily be broken with the finger. The os uteri is sufficiently open, and all that is necessary is to hook out the pieces with the finger.

“The uterus does not go regularly on in its process of restoration to the unimpregnated state.”

In other words, there is a hemorrhage, and coagula are formed of course. These coagula prevent by their bulk, the complete contraction of the womb, which, together with the irritation they excite, keep up the hemorrhage, or are a continually exciting cause. “The symptoms very much resemble those produced by a retention of part of the placenta.” Why, then, as in the case of a part of the placenta being retained,—“if by the introduction of the finger we can feel any thing within the uterus,” are we not directed “to cautiously extract it,” rather than to prevent it by plugging up the vagina. The reasoning upon this subject is somewhat singular. In a hemorrhage of the uterus, we

are directed to plug the vagina, to give opportunity for clots to form, which clots are to stop, or stuff up the mouths of the blood-vessels. In the case under consideration, clots are already formed, and are the acknowledged cause of the continuance of the hemorrhage, ergo, plug up the vagina, and increase the collection of coagula, and you will "check the hemorrhage, and save blood."*

Dr. Denman, page 186, remarks,—“When we have the management, or are called to cases of preceding or present hemorrhage, the placenta being extracted, it should be an unfailing general rule, to examine the patient, to be sure that the uterus is not inverted; or perhaps, by slight irritation about the os uteri, to endeavour to bring on its action.”

This very important advice of Dr. Denman loses all its force, by the reasons which he has urged for its adoption. We are to examine the patient, “to be sure that the uterus is not inverted.” As this has never occurred in my practice, I should hardly be induced to examine a woman whom I had delivered, merely to satisfy myself that the uterus was not inverted. He further adds, “or perhaps, by slight irritation about the os uteri, to endeavour to bring on its action.” The doubtful manner in which this important hint is expressed, in connection with the remark which I have already quoted, “that he never troubled himself with the state of the uterus, unless it was inverted,” is

* As plugging the vagina, is, with Mr. Burns, so important a remedy in all the varieties of uterine hemorrhage, the following description of the manner of performing it, and his reasoning upon its mode of operation, and the effects of coagula, will be here inserted. In the hemorrhage which attends abortion, he observes—“But the most effectual local method of stopping the hemorrhage, is by plugging the vagina. This is best done, by taking a pretty large piece of soft cloth, and dipping it in oil, and then wringing it gently; it is to be introduced with the finger, portion after portion, until the lower part of the vagina be well filled; the remainder is then to be pressed firmly on the orifice and held there for some time. This acts by giving the effused blood time to coagulate. Plugging can never retard the process, nor prevent the expulsion of the ovum; for when the uterus contracts, it sends it down into the clotted blood in the upper part of the vagina, and the flooding ceases. Faintness operates in the same way in many cases, by allowing coagula to form in consequence of the blood flowing more slowly; and when the faintness goes off, the coagula still restrain the hemorrhage in the same way, as when the plug has been used. This naturally points out the advantage of using the plug together with digitalis, as we thus produce coagulation at the mouths of the vessels, and also diminish the vascular action. It will likewise shew the impropriety of using injections at this time; for by washing out the coagula, we do more harm than can be compensated by any astringent effect produced on the vessels.”

satisfactory evidence, that he placed no reliance upon it as a remedy. Indeed it is proposed as preparatory merely, to other remedies which are to be "immediately and strenuously used." If it was the general practice of Dr. Denman, in all cases of hemorrhage, after the placenta was extracted, to examine his patient, and "by slight irritation about the os uteri to endeavour to bring on uterine action" (which action can be no other but contraction) as the first step, he would (if he had been less strenuous and less in a hurry in the application of other remedies) have discovered, what I have no doubt was the fact, that the suppression of the hemorrhage, when it happened, was generally effected without that assistance of his other remedies.

2d. In the hemorrhage which attends abortion, in the early period of pregnancy. Van Swieten, sect. 1309, remarks:—"Hence in hemorrhages of the uterus, which happen during the first months of gestation, it does not seem at all advisable to attempt to bring away the fœtus; for it is allowed by all, that women rarely die of abortion, at this period of pregnancy. Many I have seen preserved by those remedies and management, which have been particularly recommended in sect. 1307, notwithstanding they have been convulsed from the profusion of the hemorrhage, and thought by all present just ready to expire."

Mr. Burns, page 53, observes:—"It was at one time a very frequent practice to endeavour with the fingers, or small forceps, to extract the fœtus and placenta in order to stop the discharge. Puzos strongly opposed this practice, and it is now very properly given up as a general rule. I do not wish, however, to be understood as altogether forbidding manual assistance."

Dr. Denman, page 158, remarks:—"It was said that no manual assistance was required in the management of abortions—and no rule can be more generally true—yet there are some exceptions."

The result of my own observation and experience is in opposition to this general rule. I have so often been disappointed in my attempts to suppress hemorrhage, in the early part of pregnancy, in any other way than by extracting the fœtus and placenta, that for many years past it has been my principal aim, when all hopes of preserving the fœtus was at an end, to effect this object; and very rarely has there been any difficulty in accomplishing it, without violence, or such a degree of irritation as to prove in the least injurious. Advantage should always be taken of the time when the flooding is most profuse, and the pains most severe. In the intervals of pain and flooding, the os uteri may be too much contracted to admit of any assistance. The fingers are generally all that is necessary. In some cases

forceps, guided by a skilful hand, may greatly facilitate the extraction. In a single instance, where the flooding had continued so as to excite great alarm, notwithstanding the usual remedies had been faithfully applied, I found it necessary to introduce the hand into the vagina. The extraction was then effected without difficulty, and with immediate removal of the flooding. In those cases, where the ovum has not been so far advanced as to admit of extraction, the examination, and gentle attempts to dilate the os uteri have, as I believe, abated the hemorrhage, and excited the efforts of nature for the expulsion. Mr. Burns in enumerating the causes of abortion, observes, "that introducing the finger a little way within the os uteri, and irritating the part by gentle, but long continued motion, is the best example of the effect of mechanical irritation."

It will be unnecessary to remark, that I have never been prevented from making the attempt to extract the fœtus, or placenta, from any fear of increasing the hemorrhage, by the removal of coagula, either from the vagina or uterus. The following case will be an example of the effects which a very small portion of placenta, or other entraneous substance, frequently have in exciting and keeping up uterine hemorrhage.

Mrs. L., when I first saw her, informed me that she had had a severe hemorrhage for two weeks previous, but that for twelve hours past it had been excessive.

The pulse was hardly perceptible, the extremities cold, and the faintness alarming. I inquired, if she had had an abortion, and was informed that there was no other evidence of it than the hemorrhage, which could not be suppressed by the usual remedies. I examined her, and found a piece of placenta within reach of my finger, which was extracted without difficulty. It was about the size of the end of my finger, and putrid. The hemorrhage immediately stopped, and she recovered.

3d. Of the hemorrhage which occurs in the advanced stages of pregnancy. On this particular state of hemorrhage I have few remarks to make. In all the cases, which have come under my direction, delivery, when it took place, has been effected in the natural way. By dilating the os uteri, such a contraction has been excited as to suppress the hemorrhage, and bring on the pains of labour. But this is not always to be expected. In one instance the flooding had continued twelve hours previous to my seeing the patient, attended with slight and transient labour pains. On examination, the os uteri was dilated so as to admit two fingers. The edge of the placenta presented. By gently dilating the orifice the pains were increased and the hemorrhage greatly checked. The strength was, however, so

much exhausted by the previous discharge, that the pains were feeble, and the faintness alarming. Little progress was made in the labour for two hours—but as the hemorrhage had subsided, it was judged prudent to desist for a time in the attempt to hasten the labour. The patient was advised to use no exertion but what was spontaneous, to take some nourishment, and to rest as well as her situation would admit. After sometime a small dose of laudanum was exhibited. This produced a very favourable degree of excitement. The pains soon after became more frequent and forcible. The faintness was removed, and the delivery happily effected. The placenta was, as I judged, entirely separated from the uterus, and discharged immediately after the child. The child had probably been dead for twenty-four hours. The woman, though extremely exhausted, recovered and has since borne children. This mode of effecting delivery in cases of uterine hemorrhage was adopted as a general rule by Puzos, and highly approved by Van Swieten.

Mr. Burns observes that this was a material improvement upon the blind, rash practice that then prevailed, and that its simplicity gave him, at first, a strong partiality in its favour, but intimates that he has since changed his opinion. "It is, as he justly remarks, a point of great practical importance."

Dr. Bard in giving directions for turning and delivering the child, when judged necessary, by a flooding, remarks:—"It frequently happens that the first introduction into the womb, even into the vagina, exciting the contraction of the womb, checks the hemorrhage, and then, though we are never to desist, we may act with deliberation." When it is found that the mechanical irritation which is here mentioned, and which is an example of the principle that I have attempted to support, does in fact check the hemorrhage—it will be an important subject of inquiry, whether some dependence may not be placed on it as a remedy, till time is given for delivery in the natural way without turning the child, in some, at least, of those cases in which immediate delivery is recommended. I have for myself more confidence in its safety and efficacy, in the flooding which takes place before delivery, than in plugging the vagina, or any other single remedy—but at the same time acknowledge that my own experience in this particular case, has not been sufficiently extensive to enable me to decide how much reliance is to be placed on it, in those dreadfully alarming cases of flooding which sometimes occur, and in which the skill, fortitude, and prompt decision of the attending physician are so imperiously demanded. While there is a favourable prospect of suppressing the hemorrhage without immediate delivery, it will be in aid of any reme-

dies that may be employed to remove coagula from the os uteri, whenever labour pains are excited by them. The degree of irritation that can be advantageously employed can best be determined by its immediate effects.

4th. Excessive menstruation.

Mrs. M., aged forty-five, had been for some time irregular in her catamenial turns, and for two or three months previous, had missed. As this was not uncommon with her, and as she had not been affected with the usual symptoms of gestation, she had no suspicion of being pregnant. She was however seized, pretty suddenly, with flooding, but without any considerable pain. The usual remedies were employed. The discharge continued notwithstanding, for twenty-four hours, and her strength was greatly exhausted. A careful examination had been made of her discharges, and neither fetus or any other substance but blood, had been discovered. I then examined her and found the os uteri closed, so that the finger could not be introduced. The clots were removed from the vagina, and carefully examined, and from all the circumstances of the case I was fully persuaded that she had not been pregnant, but that it was merely a case of excessive menorrhagia. After gently irritating the vagina and os uteri, for some time, I was highly gratified to find that the discharge had entirely subsided, and there was no return of the complaint.

Mrs. A., a very respectable widow, the mother of one child, aged thirty-five, regular in her menses, about two weeks after her last turn, was suddenly taken with a violent flooding. The physician who attended had treated her judiciously, with the usual remedies, for six or eight hours before I saw her, but the discharge continued without any intermission; her strength was extremely reduced. As there was but little pain attending, I did not believe that there was, in this case, any clots or other extraneous substance, in the uterus, that kept up the discharge. I mentioned to her the principle upon which I expected she would obtain relief by an examination, which was simply, by gentle irritation about the mouth of the womb, to excite that contraction which was necessary to stop the flooding; and related some of the cases in which I had known it have that effect. She readily consented to any measures which were judged advisable,—viewing her life in imminent danger. I then examined her, removed the clots from the vagina, and found the os uteri contracted. I gently irritated the orifice for several minutes, and had the satisfaction to find that the discharge was immediately and entirely suppressed, and did not return. The same woman has twice since, after an interval of about two years each time,

been similarly affected and relieved in the same manner. These turns of hemorrhage have uniformly been a week or two after the regular catamenial turns. She has attributed them to some unusual bodily exertion, as the immediate exciting cause. In one of the instances I found it difficult to reach the os uteri, and the irritation was of course confined to the vagina, and produced the desired effect. The last time she was attended with the hemorrhage, bleeding in the arm, cold applications, astringent injections, &c. had been premised without relief.

In both of the cases last recited, the hemorrhage was evidently suppressed by the effect of mechanical irritation upon the vagina and os uteri, in exciting contraction, and not by the removal of any extraneous substance.

The principle of exciting uterine contraction by mechanical irritation, with the hand of the operator, has for various purposes, and in various ways, been known and practiced as long as midwifery has existed as an art. It has been employed, with incalculable mischief, to expedite labour in ten thousand instances when no assistance was required, and in some cases when it was necessary and useful. It has been employed to suppress hemorrhage in that flaccid state of the uterus which sometimes occurs after delivery—as has been already noticed, and in a great variety of ways in other conditions of uterine hemorrhage, with a different intention. In the operation of examining the uterus, or of introducing balls of snow, ice, sponges, or cloths wet with cold water and astringent solutions, there is, of necessity, that mechanical irritation upon the vagina, which is calculated to excite uterine contraction, aside from the direct effect of cold, astringents, &c., and thus to suppress hemorrhage. Plugging the vagina is another example of the effect of irritation in exciting this contraction. That this remedy has been often used with success, in suppressing uterine hemorrhage, there is little room to doubt. But that it effects this, by confining the blood, and thus favouring the formation of coagula, I do not believe. The cloth cannot be introduced into the vagina, “portion after portion,” without producing in the operation itself a considerable irritation. Its continuance there will be a continuance of the irritation. In this way, and in this alone, has the operation of plugging the vagina acquired all the celebrity which it has ever obtained. For this purpose, merely, it is a troublesome, inconvenient, uncertain and unsafe mode of effecting the object desired. Dr. Bard remarks, “I confess I have no experience of this remedy, and from the slight manner in which Dr. Denman mentions it, I suspect he was not quite satisfied of its safety and utility. The principal objection to this

remedy seems to be that it may only conceal, instead of checking the hemorrhage—and as sometimes happens from other causes, the woman may continue to bleed internally, although that is not manifested by any external discharge.”

In the several ways which have been mentioned, mechanical irritation has been employed in uterine hemorrhage. Whenever the introduction of any substance into the vagina has been effectual to stop the discharge, some part, at least, of the effects of the remedies which have been thus employed, and frequently the principal part are to be placed to the account of the irritation which has been thus excited, and consequent contraction. But it will readily be perceived, that the principal effect of any remedies which can be inserted, must be confined to the vagina. It is by the hand alone that any remedy can, with safety, come in contact with the uterus for the purpose of irritation—and for this purpose, the hand is all that is necessary. By this the degree of irritation, the length of time necessary for continuing it, and the part upon which it will have the greatest effect, which will generally be the os uteri, can be regulated at discretion—while, at the same time, its effects and the exact state of the hemorrhage can be ascertained.

It is acknowledged that in most cases of flooding, particularly when it precedes abortion in the early periods of gestation (which is of the most frequent occurrence in practice) the efforts of nature, unassisted, will sooner or later expel the offending substances from the womb, and effect the cure. But it is the object of the healing art to preserve health as well as life. The frequent occurrence of obstinate chronic diseases, which are to be referred to a great loss of blood from abortion as their cause, has come under the observation of every practitioner. It will always be an object of importance to prevent a great and long-continued waste of blood, even where immediate danger is not apprehended. The sooner the hemorrhage is suppressed, the less likely will it be to produce that lax state of the system, and especially of the uterine vessels, which is the attendant of perpetual and obstinate menorrhagia or leucorrhœa. In too many instances from this source does the reproach still rest upon our art, which is contained in this short narrative. “There was a certain woman which had an issue of blood twelve years, and had suffered many things of many physicians, and had spent all that she had, and was nothing bettered, but rather grew worse.”

It is to be remarked that the employment of mechanical irritation for flooding does not exclude any of the remedies which have heretofore been employed, that are not incompatible with its use. Pressure upon the abdomen, brisk friction, cold and as

tringent applications and injections, and a due regard to the vital action, may, in many cases, produce the desired effect. In some cases these, or the like remedies, may be advantageously combined with mechanical irritation, and in some all will prove ineffectual. Where life is departing, with the last remains of the vital fluid, it cannot be recalled.

Bleeding may sometimes be useful to prevent, but seldom to cure profuse hemorrhage. Plugging the vagina, and all other means of confining extravasated blood in the vagina, or uterus, ought to be excluded from practice. No favourable effects are to be expected from faintness, which can compensate for the alarm and actual danger which attend it. In addition to the usual means which are employed to prevent or remove this symptom, I have witnessed the good effects of raising the foot of the bedstead so as to favour the pressure upon the brain—the energy of which is sometimes totally destroyed by a sudden depletion of its vessels. It is very justly remarked by Wilson, “that it is only in the active state of the hemorrhage that syncope can be encouraged for its suppression. When the hemorrhage has become passive it is attended with great danger, and must be prevented by the usual means.” The following important advice of Dr. Denman, in cases of extreme exhaustion from flooding, cannot be too strongly impressed upon the mind of every practitioner. “Above all, the patient is not to be disturbed or raised to an erect position, but the small portion of the principle of life is to be carefully husbanded; and there is often a power of living in a quiescent state, or in a recumbent position, when the patient would be destroyed by the least exertion, or by being raised to an erect position. Whether an hour or a day be required for this purpose, after a profuse hemorrhage, the patient ought not to be raised, or even moved, before she is quite revived, and then with the utmost care and circumspection; and through want of attention to this matter sudden death has sometimes happened when we were not suspicious of danger.”

Ergot has lately been employed as a remedy in flooding—of its use, for this purpose, I have no experience. That it usually excites a contraction of the womb is admitted, though I have seen it exhibited in large doses without any sensible effect. From its nauseating effects upon the stomach, and from the difficulty of adapting the dose to the effects required, or of exactly controlling its operation, I should judge it to be a doubtful, and an unsafe remedy in cases of great exhaustion and consequent faintness and nausea. Where mechanical irritation is employed, it will in most cases be unnecessary.

The present improved state of the art of midwifery renders the occurrence of flooding, after delivery, less frequent than formerly. While it was the general practice, both of male and female practitioners, to endeavour to expedite delivery by rough and long continued handling, in which muscular strength was considered an important qualification—and as soon as the bruised head was extracted, to seize it, and drag forth the child with all possible expedition—to tie and cut the navel string and extract the placenta with the same *dexterous* expedition—and the patient, through the whole process, kept in an erect position, and dosed with spirits and hot teas—and after this to be confined to her bed for a week at least, with an unusual weight of covering, in a hot room, with the external air cautiously excluded, without changing her linen or bed clothes, and no regard paid to evacuating the bowels—floodings, puerperal fever, and death, were too often the consequence. It was not till the alarming and extensive mortality from puerperal fever that occurred about thirty-five years ago, in this region of country, that this preposterous management of lying-in women was generally abandoned. White's treatise on this subject, which first appeared about this time, greatly contributed to effect a favourable revolution in the whole department of the management of lying-in women.

And here I cannot but notice the obligation which the public are under to our distinguished countryman, Dr. Bard, for his laudable attempt to extend the knowledge and the advantages of the present improved state of obstetrics, even to female practitioners, and for the very able and judicious manner in which he has executed his design. But notwithstanding all the improvements of the last forty years, in this branch of the art of medicine, there is still too much remaining prejudice in favour of the old system. It will be long, if the time ever arrives, before women in the distress of child-bearing, even in its ordinary favourable circumstances, will be convinced that no assistance can be afforded them in the delivery of the child. The operator must suffer the imputation of ignorance, of inattention, or want of feeling, who shall tell them the truth and withhold his supposed assistance.

In addition to the evil consequences of over officiousness and improper management in delivery, there are many unfavourable circumstances from accident and unknown causes, to which women are liable in pregnancy and in childbirth, which no skill or care of the physician can prevent. The various disorders arising from this source will claim a large share of the attention of every practitioner—and of these, uterine hemorrhage will perhaps be most important, both as regards its prevention and cure.

The preceding remarks, which are the result of the attentive observation and experience of more than thirty years, are submitted to the candid consideration of the medical profession, in the hope that they will furnish some useful hints, for alleviating the sufferings which are the lot of women, especially in a disorder, which more than any other excites all our sympathies. I am sensible of the errors, to which physicians are liable from a partiality to particular remedies, and to favourite theories. From this very common infirmity I have no right to claim an exemption. So far as the mode of treatment, which I have recommended, varies from the practice of the most approved authorities which I highly estimate, it ought to be admitted with due caution. It is the test of experience, and a careful examination of the principles upon which any mode of practice is founded, that can sanction it. Truth is the only authority to which we are bound to give our unqualified assent.

. Sharon, Con.