

MAN

## INAUGURAL DISSERTATION,

ON

*Hæmorrhagia Uterina*

PRESIDENT, BOARD OF TRUSTEES, AND MEDICAL FACULTY

OF THE

UNIVERSITY OF NASHVILLE,

FOR THE DEGREE OF

DOCTOR OF MEDICINE.

BY

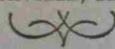
*Van B. Gilbert*

OF

*Alabama.*

March

1857

CHARLES W. SMITH,  
BOOKSELLER AND STATIONER,  
NASHVILLE, TENN.

To  
John M. Watson, M.D.,  
Professor of Obstetrics and the  
Diseases of Women and Children,  
in the University of Nashville,  
This humble dissertation  
is most respectfully  
dedicated,  
by  
The Author.

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### Hemorrhagia Uterina.

Ordinarily, during the course of gestation and parturition, nothing occurs, demanding the active interference of art. But there are numerous deviations from the ordinary course of pregnancy and the expulsion of the contents of the uterus, which do necessarily require the intervention of Medical skill. Among these various occurrences of dystocia, which so gravely complicate the natural process of gestation and labour, none are more replete with interest and importance, or more richly deserve the strict attention and thorough investigation of the student of

Medicine, than Uterine hemorrhage. The imminent danger to which it subjects the sufferer, the suddenness of its attack, the rapidity of its progress, and the often insidious and concealed manner of its occurrence, all conspire to render it, one of the most formidable accidents, incident to puerperal women, whether manifested before, during, or after parturition, almost inevitably compromising the life of the child, at the former period, and always endangering that of mother at whatever stage developed.

Under these perilous circumstances, where prompt and efficient action is indispensably necessary, the

urgent appeals of a devoted husband, and affectionate children - to save a loving wife and mother - when made to him, who, from a want of professional attainments, is inadequate to the emergency will prove a withering blast, and cause him to bewail in tears of blood, the fatuity which urged him thus to sport with human life; but if made to him, who is ready and competent, to promptly rescue her from impending danger and restore her to the bosoms of lamenting kindred, will prove a source of the greatest pleasure and satisfaction, and leave within "a peace above all earthly dignities, a still and quiet conscience." These considerations ought

to be sufficient to actuate the  
the dullest mind and most  
unfeeling heart to a just esti-  
mate of the nature and extent  
of the fearful responsibilities  
devolving upon practitioners of  
obstetrics, and to induce every one  
to familiarize himself with the  
indications presented in the  
formidable occurrence of uterine  
hemorrhage, and the appropriate  
remedies to combat them.

We design considering uter-  
ine hemorrhage attendant upon  
gestation, during, and after par-  
turition. And first it is nec-  
essary to review the causes that  
operate in producing this hemorrhage.

These very naturally resolve themselves into the predisposing, exciting or determining, and special causes. Numerous circumstances might be enumerated, as predisposing this organ to hemorrhagic accidents; such as, a sanguineous temperament, a general plethoric condition of the system, that nervous susceptibility and delicacy of sensation, peculiar to pregnant females, the extreme liability of this viscus, from the considerable afflux of blood which conception determines to it, and the pathological and physiological changes that gestation impresses upon it, to become the seat of all disorders of the general system,

The influence of habit in determining a greater congestion of the gestatory organs at the period of return of the catamenia, the presence of any adventitious growths within the cavity of the uterus, the process of vascular organization constantly going on in the uterine parietes, in which the calibre of the vessels is greatly augmented, and consequently the thickness and resistance of their walls proportionately diminished, rendering their rupture more easily effected by the action of an exciting cause.

The determining or exciting causes co-operating with this predisposition, are almost inevitably

followed by flooding, whereas in its absence, the most violent shocks, moral and physical, may be borne with impunity. Hence those causes denominated, determining, excite or bring into play the predisposing causes.

Any vivid moral impressions, or any violent physical commotions, such as, frights falls, blows, fatigue, over-exertion &c, act as exciting causes in producing uterine hemorrhage, and either upon the principle of inducing a sufficient congestion to rupture the enfeebled walls of the utero-placental vessels, or of exciting uterine contractions, which

break up the adhesion between the womb and placenta and expose the mouths of torn vessels.

Of the special causes of uterine hemorrhage, placenta previa, or the implantation of the placenta over the cervix uteri, is of the most frequent occurrence and of the greatest importance. Hemorrhage is so nearly an inevitable consequence of this abnormal insertion of the placenta, that it has been denominated "unavoidable hemorrhage." Indeed such a combination of circumstances as would prevent its invasion, is certainly a mere accident, of exceeding rare occurrences. Concerning the

cause of this hemorrhage occurring especially in the latter months of utero-gestation, there has been considerable controversy. Most obstetricians however are agreed in attributing it to the modifications occasioned by pregnancy in the disposition of the neck of the uterus, during the latter months, "that during the early months of gestation, the womb is developed at the expense of the fibres of the fundus and body, but that during the latter months, the neck contributes its mite to the general enlargement, and that the placenta being immovably implanted

over it cannot follow the spreading out of the neck, and hence the bonds of union contracted between the placenta and womb, become broken down, the utero-placental vessels ruptured, and hemorrhage ensues."

There has also prevailed great discrepancy of opinion concerning the anatomical source of hemorrhage in cases of partial separation of the placenta, or what has received the name of "accidental hemorrhage," from the fact that it does not necessarily result when the placenta is inserted on the fundus or body of the organ. Some authorities affirm, that it

proceeds principally or wholly from the uterine surface, others contend that it is principally or wholly placental, whilst a third class entertain the opinion, that it is both uterine and placental hemorrhage, the blood escaping partly from the uterine and partly from the detached placental surface. Reasoning from analogy we should be driven to the conclusion, from the experiments of Mackenzie, Marshall, and others, on the bitch at the full term of utero-gestation, made for the express purpose of elucidating this point,

that it is principally or wholly from the uterine surface, and that the blood, from its possessing the bright vermillion tint characteristic of arterial blood, is rather arterial than venous blood. They were fortunately enabled to confirm what analogy taught, by experiments on the human uterus, which lead to the same results, as those made upon the bitch. They found that on separating the placenta from its attachment, blood, of a bright scarlet hue, escaped from the denuded uterine surface, while none, or to a very trivial extent, flowed from the placental.

This view of the source and character of the blood in accidental hemorrhage, would seem to be further corroborated by the generally accepted axiom in obstetrics, "that contraction of the uterine fibres, is the essential means of arresting uterine hemorrhage," for the contractions of the uterus would exert little or no influence upon the fetal surface of the placenta.

Hemorrhage is peculiar to no particular period of gestation, occurring as it does at all stages, after the decidua and chorion have contracted a union between the ovum and

uterus, which connection, when separated, will necessarily be followed by a discharge to a greater or less extent. But although the uterus is liable to this accident at any time during pregnancy, yet it is more frequently attendant upon the latter months, and especially during, and subsequent to, delivery.

Ordinarily there are some general symptoms manifested during the few days preceding the accident, which prelude the occurrence of uterine hemorrhage, such as a general uneasiness, a heavy sensation, and partial numbness and insensibility in the pelvic region,

dull, aching pain in the thighs and loins and not unfrequently a constant desire to urinate. When these precursory phenomena, which are characteristic of uterine congestion, occur in a sanguineous temperament, there is also manifested, simultaneous with them, those symptoms usually attendant upon general plethora. But if the hemorrhage be the consequence of the violent action of an external cause, the flooding itself will be the first symptom developed.

Internal hemorrhage may occur and escape detection, until its presence in the womb gives rise to such secondary symptoms, as

a sensation of weight in the loins, and fundament, gripping pains, and when profuse, swelling and great tension and resistance of the abdomen, yawning and fainting, and all the phenomena produced by the loss of blood from any other source, cold extremities, feeble pulse, pallor of skin, &c.

Hemorrhage during the first months of utero-gestation, may be confounded with a return of the menstrual flux, but the mode of development of the accident and its attendant circumstances, will generally enable us to discriminate between them. The unfrequent occurrence however of the menses

in the latter months of pregnancy, will justify us in diagnosing any discharge of sanguine fluid in that period, as uterine hemorrhage.

Unavoidable hemorrhage occurs only in the latter months of pregnancy and differs in its occurrence from accidental hemorrhage, in coming on spontaneously without any apparent cause, perhaps, when the patient is perfectly calm, quiet, and free from all excitement, in sudden gushes, and suddenly subsiding recurring at uncertain intervals under similar circumstances &c.

An examination, per vaginam,

in conjunction with these phenomena, will generally disclose a case of placenta previa.

A rapid augmentation in the size of the abdomen, syncope, yawning, cold extremities, feeble pulse, &c, are the characteristic symptoms of internal hemorrhage.

The prognosis is generally unfavourable. The quantity of blood discharged varies greatly in its effects upon different constitutions. That flooding, which would prove fatal to an anemic patient, would perhaps exert a salutary influence on the athletic, vigorous, and pliethoric constitution,

The danger to be anticipated from uterine hemorrhage, is greatly dependent on the stage of gestation in which it is developed, being proportionately greater to the mother as pregnancy advances, because of the greater development of the vessels from which the discharge proceeds, which of course will yield, in a given time a greater quantity of blood, whilst to the child, it is most fatal in the first part of gestation.

Hemorrhage, during labour, is most to be dreaded, when it occurs in the first part of that process and more so in a primiparous woman, than one who has previously

born children. As a general thing we apprehend more danger from internal than from external hemorrhages, because of the great difficulty of detecting the existence of the former. Of all the different varieties of uterine hemorrhage, that resulting from an implantation of the placenta over the os uteri, is the most perilous, both from its frequent occurrence in the latter part of alero-gestation, and its great abundance.

### Treatment

Treatment The special treatment of uterine hemorrhage is greatly dependent upon its source and time of occurrence.

But there are some general therapeutic measures applicable to every variety of this accident, and are essentially necessary to secure the efficient action of the special means, such for instance as, a well ventilated apartment, the free use of cold acidulated drinks, perfect quietude both of mind and body, in the recumbent posture, an elevated position of the pelvis on a hard unyielding matress &c.

When it occurs in the first months of gestation, besides the above named preliminary means, are should employ refrigerant fusions to the abdomen, thighs, and external genitalia, and astringent

injections, and if necessary an opiate to quiet the excitability of the nervous system. If these measures prove ineffectual, and the hemorrhage be profuse, we should not hesitate to induce the expulsion of the contents of the uterus, and permit it to contract upon the mouths of the bleeding vessels. During the last months of pregnancy, if moderate hemorrhage occur in a full plethoric constitution, venesection will be necessary, but if it be profuse, or proceed from an emaciated patient, venesection will be contra-indicated. If profuse hemorrhage, in this stage of gestation, resists the enforcement of the anti-hemorrhagic

system, the application of refrigerants, astringents &c, and continues obstinately persistent, we should employ ergot, and if that fail to arrest it, make use of the tampon, or, when it occurs near the full term, perforate the membranes.

When the loss of blood is so great as to occasion frequent fainting, stimulants are indicated to arouse the vital energies of the patient.

Hemorrhage proceeding from the implantation of the placenta over the cervix uteri, should be treated on the general principles already pointed out, and the necessary precautions enjoined to prevent its recurrence.

Mild aperients are frequently required to prevent constipation, and when there is much nervous irritability an opiate is indicated.

In hemorrhage during parturition, we should endeavor to facilitate the expulsion of the child, by rupturing the membranes, and as soon as the cervix is dilated or dilatable, by refrigerants, abdominal friction ergot, &c. If however, the cervix remains firm and unyielding, compression over the uterus to prevent the blood from accumulating within its cavity, and the tampon should be applied. If the flooding were profuse, and the travail slow, the operation of turning and delivery with the forceps would be necessary.

Lastly, we will proceed to a consideration of postpartum hemorrhage, which is by far of the most frequent occurrence, and of the greatest importance to obstetrical practitioners. Hemorrhage at this period, being generally the consequence of a partial or total inertia of the womb, the indication is to employ those remedies calculated to arouse the contraction of the organ. To accomplish this object, various measures have been recommended, such as pressure and friction over the abdomen, titillation of the os tineae, cold applications to the hypogastric region, genital organs and loins, the introduction of ice or cold vinegar in the cavity of the matrix, passing a current of electricity through the uterus, administration of ergot, application of the tampon &c.

If these remedies prove ineffectual, it will be necessary to introduce the hand and gently remove the placenta; or if the hemorrhage be subsequent to the delivery of the placenta, remove any coagula that may be present.

The hand acts as a foreign substance to the internal surface of the uterus and excites its contractions, thereby constringing the mouths of the bleeding vessels, and arresting the hemorrhage. There being always a great tendency to a recurrence of the accident, it is necessary frequently to administer opium, or the secale cornutum, as a prophylactic.

In preparing this essay, the writer has attempted to advance nothing new or peculiar, being fully conscious of the truth of the maxim, that "nullum est iam dictum, quod non dictum prius."

Pan B. Gilbert.