AN

INAUGURAL DISSERTATION

ON

Puerperal Hemorrhage.

SUBMITTED TO THE

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AND MEDICAL FACULTY

OF THE

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BY

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OF

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To

John. M. Watson, Professor of Midwifery and disease of women and Children, in the University of Nashville, in honor of his high professional attainments as a teacher and practitioner I. respectifully dedicate my Thesis.

Puerperal Hemorrhage.

The subject which I have chosen, for my Thesis is one of great importance, and one too, upon which a great deal has been written by different authors. And I will say in the beginning, that I am indebted to them for such facts as may be brought forth on the following pages, When we consider the numerous times it is liable to occur and the fatal consequences, too often necessarily resulting from it, we very plainly see, that it is a subject of the deepest interest, to any one who enters upon the study of our glorious profession. As in a severe case, When we see the breaking up of the fountains of life, and the red stream flowing, every moment.

We know is bringing a fatal ter=
=mination— These are the moments
when often all the skill of our prof
=ession is unavailible, And the most
experienced are too often compelled
to witness such ravages, and but
acknowledge their utter helplesness.
But he that understands his profession
notwithstanding he has been compelled
to see his patient pass from the stage
of existence, can but congratulate
himself, That the brightest Stars of
our profession fail, and with all the
Science and glory of our profession
we cannot counteract the will of
Providence—

One word from our profession none will
deny, but that it is the noblest of sciences,
Who could speak of it— but with the deepest

reverance. when they consider its benefit
to suffering humanity, Who can cast
a glance over the pages of past gen
erations from the time of Hippocrites,
And see the vast increase, the rapid
progress, with which our profession has
traveled, and not be compelled to
acknowledge it a noble science, Who
is there, but can look forward in his
imagination, and behold hidden, treas
=asures, concealed, behind the dark
recesses of the future, and not long to
see them brought to light, ah! more to
assist in their development
We comprise under the head of puerperal
hemorrhage, all discharges of blood
from a woman in the puerperal state,
Therefore not meaning by it, simply
a discharge from the uterus and its appendages.

but from all of the principal Viscera
Thus if a woman in the puerperal state
has haemoptysis or haematamesis, we
still comprise it under the same head, although
it may be a vicarious hemorrhage to
supply the place of a natural discharge

The causes of puerperal hemorrhage
are devided into predisposing, determining
and special causes. And first let us
look at the predisposing causes. Then
we may say, That any disorder in the
circulation, dependent upon Uterine
Gestation, was predisposing to hemorrhage
We well know, That after conception the
normal functions of the Uterus, are increased
causing an increased afflux of blood
to the womb, and to Sanguineous. Tem
-perments This does not always result
in mere hypertrophy of the

mucous membrane, but may cause
rupture and of course hemorrhage
Again in the early months of pregnancy
the embryo has but very feeble con
= nections with the womb. Therefore it
must receive its nourishment by imbibing
the secretions from the internal surface
of that organ, consequently this requires
an increased action on the part of the
Uterus, and necessarily increased cir
= culation. Then any exciting cause
acting so as to derange the harmony
existing between the ovum and womb
may bring on flooding
Then again the placenta may be a
medium through which flooding may
take place. The vessels are
developed from the Chorion and
Uterus, the vessels coming from each

surface run together simply interlacing but do not inosculate. They are then held together, by a substance like lymph, which was a secretion of the womb— how we know. There is a certain balance that must be kept up between the mother & foetus, and any cause disturbing it, and causing this balance to be overthrown immediately predisposes to hemorhage, for the blood rushing into the newly formed vessels may force so strongly, upon the walls of these vessels, as to cause them to give way. Then we see during pregnancy that the various developments, from the secretions of the womb, requires an increase in the vascular organization, in fact the whole organ becomes very highly organized and minute capillaries hyperimpercieved traverse the organ in various directions.

Then considering, the increased vascularity of the womb and of Course a particaly. co = njested state of the organ, we might naturally suppose that any cause acting so as to ca = use a rush of blow to the womb might cause a rupture of the walls of the vessels Then again the peculiar distribution of the blood vessels, in the Uterus, and. placenta predispose to hemorrhage, Thus we know that the main arteries supplying the womb ramify into various branches, whose diameters collectively, amount to more than the diameters of the main trunks Then the, blood flowing from the main trunks into the ramifications, of course the motion will be decreased, But quite differ = ent in the distribution of the Veins trunks for the disproportion is just the reverse, and of Course the blood will be increased in motion,

Then we may naturally conclude that the arteries need be entirely exempt from rupture, unless they were the seat of some morbid lesion, and that the veins only having one coat, need be very easily ruptured, But we are not to suppose that rupture is the only way in which hemorrhage may take place from these parts, but that it may and frequently does take place by extravisation — Then we may say that it may occur, by extravisation, from rupture of the veins, and more frequently the uterine placental arteries, and the veins & arteries ramifying in the decidua external to placenta (according to Cazeaux) I neglected to say that congestion of the uterine placental vessels might take by the contractions of the uterus

for of course, when it contracts
the blood is forced into the Uterin placental
vessels, and sometimes gives rise to rupture
or atleast hemorrhage in some form.
In case of rupture of one of the veins
we might say that the resisting force
is in the arteries and not in the Veins.
For was it not for the compensation
offered by the arteries, Viz. That the
force of determination is first set in
the arteries, & subsequently, transmitted
to the veins. doubtless we would
have hemorrhage very frequently —
At last our inquiry
may be, Why should all these conditions
incident or rather coincident with pregnancy
predispose to hemorrhage, Simply
because so soon as conception
takes place the Uterus becomes.

the seat of irritation, and seemes
to be a center upon which all disord
=ers settle into the form generaly of
congestion, and any cause acting so
as to derange the balance, may cause
such an increase of blood, as to
cause rupture and of course hemorrhage,
A great many things might be enu
=merated as predisposing causes to this
hemorrhage, such as over exertion
of any kind, too generous diet, too free
use of alcaholic drinks, also local
irritants of any kinds. all of which
act upon the womb indirectly - thus.
they first produce there influence upon
the general economy, and lastly by
reaction, act upon the uterus, causing
the organ to become congested, and of course
easily subjected to exciting causes —

We will next speak of some of the determining causes, and perhaps it will be better to be more limited ——
As for determing causes we may say that a predisposing cause continuing to act, may at last become a determining cause. But not only this, but any impression acting upon the entire organism or directly upon the Uterus, may determine this hemorrhage. And I believe it is said, that when the cause acts upon the entire system first, and subsequently upon the womb, gives rise to the more serious hemorrhage, and these act, not by simply engorging the Utero placental vessels, but the effect is first produced upon the Uterus, and lastly upon the Utero placental vessels. And I believe it is said that in the

early months of Utin Gestation
That congestion of the Utin placental
vessels more frequently results in exfoliation
Whereas in advanced periods such
a congestion, owned more likely result
in rupture of those vessels.—
But I presume we might say that, det
-erming causes, would have but have
but little effect, unless there was previously
existing a predisposition.— Thus we
see in some patients, a very slight
wound give rise to a severe hemorrhage
and others, who sustain severe shocks
with no bad results.— This I think
would be entirely dependent upon
predisposition
Our next head comes under that
of special causes of puerperal
hemorrhage, which are generaly

manifested in the latter months of
utero gestation, perhaps from an
abnormal condition of the uterus, relative
to the womb, or abnormal insertion of
the placenta. For instance, suppose the
placenta to be inserted over the neck
of the womb, now because, in first
place, the inferior portion of the womb
does not participate in the enlargement
until the last three months, and the pla
= centa having received its growth previous
to that time, so soon as that portion com
= mences participating, immediately the
vessels of the placenta are liable to be
ruptured. For the placenta cannot
follow unless a detachment take place
which will also result in hemorrhage
of course, this would be a special cause.
In any case of pregnancy where,

The fœtus dies, as a matter of course
There will be no hemorrhage, because
the increased vascularity and irritation
of the womb is reduced, for the increased
action of secretory organs. Necessary
for the sustainance of the fœtus is no
longer required and of course removes the
cause of hemorrhage.
Again rupture of the cord or some of
its vessels. may cause hemorrhage,
This occurs sometimes, perhaps from
disease of its walls or shortening, and
this shortening might be caused, by frequent
turns of the cord around the child
But I presume. that when there is a rupture
of the cord. That there generaly existed a
disease either in the walls or surrounding
tunics, Now the immediate movements.
of the fœtus, caused by the frequent turns

of the cord around it, might cause such traction upon the cord, as to cause its rupture. It has been said by authors that the brevity of the cord, might cause a premature detachment of the placenta, but I believe this opinion seems to be objected to by Carcanus. He says that in consequence of the pressure to which the placenta is subjected to, by the amniotic fluid internally, and the womb externally. That the detachment would be almost impossible. by the tension of the cord He reasons thus, he says that the tension of the cord, only takes place during the advancement of the child, and that the placenta is subjected to a pressure at that time, equal to the tension of cord. Thus he conceives detachment at such a time impossible.

But Carcaux. does admit, that there may be a detachment of the placenta before or during Labor— Thus in extreme brevity of the cord, and very immediate movements of the foetus, it might be detached, for. Then we see, the pressure of the fluids and womb. would not be present. But he conceives this must be prior to the escape of waters, for then the pressure of the foetus itself would overcome. the force of the cords action, unless in a case, as when the child is born in a caul the head pushing the membranes before it., reflects this force to the placenta, and may cause its detachment, Again rapid contractions of the womb may cause hemorrhage, by breaking up the cellulo Vascular attachments

of the placenta, Now this contraction is a physiological action, but when carried to far, may cause detachment of the placenta, which more frequently takes place in dropsy of the amnios, because when the waters escape, the diminution causes the contractions to come on.

I shall next speak of some of the symptoms, and we well know that they are devided into general and local, We may enumirate some of the symptoms as. First those that precede the flooding, as when a woman has all the symptoms of Uterine congestion, she feels heavy and dull, straining at stool, desire to pass urine, and general uneasiness in her limbs, But not only this. but.

Connected with it are all the symptoms of general plethora. These are the general symptoms preceding the flooding. But soon these symptoms of congestion give way, and the immediate symptoms of flooding appear, such as pallor of skin, feeble pulse &c.

The local symptoms may be divided into external and internal, as regards the external hemorrhage, the mere flooding or escape of blood is sufficient to diagnose the case, But quite different in an internal hemorrhage, in the earlier months of Utin gestation, there may be an escape of blood imperceived, though very frequently it forms a clot and consequently causes pain, besides this, there is a general sense of fulness,

This is in the early months. But

in the latter months. Frequently we have great tension of the abdomen.. Sometimes fluctuation. Then suppose hemorrhage to take place in labor, the commencement of each pain is charecterised by the escape of blood. As regards the seat of effusion, we Well know it must be different under different circumstances, Thus between the uterine surface of the placenta and the Uterus, and in such a case perhaps the escape of blood externally might be very little, because it might be effused in the middle of the placenta, While the surrounding edges, would remain adherent. Then again it might be into the substance of the placenta, constituting. placental apoplexy, and into the amnion itself &c.

Perhaps it is useless to go into a detail of the seat of effusion and therefore will at once come to the diagnosis. There is great difference in diagnosticating a case of hemorrhage, as regards the time at which it occurs. For if it occurs during the first six months perhaps there may become obscurity in diagnosing it, because we would not know but that it was a natural discharge, But when our attention is turned to a hemorrhage in the last three months, we know (unless a very rare occurance) that we must arrest the discharge, Therefore our next inquiry would be, What causes this discharge, And I believe that authors agree, that in hemorrhage occuring during the last three months,

is most generaly caused by an abnormal insertion of the placenta over the cervix uteri. This may occur center for center or be attached by one of its borders, and I believe the flooding appears sooner in the former. Another peculiarity as regards the insertion of the placenta. When it is inserted center for center the flooding is more profuse during uterine contractions, whereas in the other form, the flooding is more profuse during the interval. In making an examination, per Vaginum in case of insertion of the placenta over the os uteri, you will find the os thick and spongy, caused by the hy=pertrophy of its walls, which enlarg=ement was owing to the afflux of blood.

to it, from the irritation, caused by the presence of the placenta. Perhaps the blood may be very bright, all these symptoms I have enumerated are relative to external discharges - and as for internal discharges, I believe I have mentioned the most characteristic signs under the head of symptoms, Thus we would have enlargement of the abdomen, and all signs of loss of blood. But we are not to suppose the mere enlargement of the abdomen is hemorrhage, because there are other causes that might have this appearance. But I do not deem it necessary to dwell upon this internal discharge

As regards the Prognosis of this discharge, of course it must be.

very different, under different circumstances. Thus if a very full plethoric woman have hemorhage perhaps it might benefit her but in a feeble anemic person it might end very badly. Then I believe the general idea is that the prognosis is unfavorable. We know that it is more dangerous in the latter months of pregnancy, and when the placenta is inserted over the os. More than when inserted at the side, And again we consider, intern al hemorhage the most dangerous, because it may form a clot, which may cause irritation and finally contractions of the womb, and again bring on hemorhage, so much I consider necessary, concerning the prognosis—

But we know that there a variety of circumstances complicating hemorrhage, and rendering it more fatal.

Treatment.

As regards the treatment of hemorrhage, I hardly think it necessary to go into the various plans. as I have not room. But suffice to say position has a great deal to do. with her, she should be in a horizontal position. hips elivated general quiescence of both mind and body. again the treatment is different at different periods, But in all we give acidulated drinks. keep bowels open. use the catheter if required, and low diet, and more especialy if your patient is plethoric, use the Lancet. also in external hemorrhages. many authors advise

Ergot after the membranes are rup-
tured, and the os dilated. But
I think I should go with Dr Bedford
of New York, he uses Laudanum in
very large doses, say a tea spoonfull
every 15 minutes, until the hemorrhage
ceases. This he conceives to be the best
remidy in hemorrhage, He says if
you have a severe case, and the pla-
centa is detached, he would introduce
his hand and make friction upon the
part, at the same time causing
some one to dash water upon
the abdomen, by this means bringing
on uterine contractions, and arrest
of hemorrhage. The treatment
would comprise to many pages to
give a full discription here, Therefore
I propose concluding my subject-

But first let us think how important
this form of hemorrhage is, consider
=ing its too often fatal results, How
important it is for us to understand
the intricate works of human fabric
the various ways in which this hemorrhage
may occur. Certainly if he is ignorant
of these, he has no basis upon which
to build, Now I conceive there is
nothing that requires greater skill
than a severe case of Uterine
hemorrhage. Let us suppose a
case, a woman perhaps a dear
friend lies prostrate before you,
her all is placed in your hands.
If you are ignorant of her case
was by vile partiality or persuasion
that she was led to place herlife
in your hands. She is sinking

into that long sleep from which she will never awake. The lamp of life is almost extinguished, but still a glimer can be perceived in the distant wavering as if every moment was the last -

There she lies a victim of that passion instilled within her from the garden of Eden. Think how powerfull is he who can divert that approaching destiny almost sealed by Natures course. If you are success = full. the pathway to future glory and honour is laid, but if not let echo answer the result ——

Finis.