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INAUGURAL DISSERTATION

ON

Puerperal Fever

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To Professors J. M. Watson and W. K. Bowling this article is most respectfully dedicated by their humble and devoted Servant the auther.

Puerperal Fever.

A term applied to a dangerous form of inflamation to which puerperal women are exposed. and we suppose there is no maledy to which She could be exposed that would create so much anxiety among the friends and relatives and even the physician. For it probably occasions a far greater amount of fatal results than any other disorder with which the obstetrician may have to contend. As it regards its true nature post mortum examinations have revealed

inflamation of the uterus or peritineum or both of them combined. Which receive the different terms of hysteritis peritinitis &c. As this is the true pathology of the disease we readily perceive the impropriety of the term puerperal fever, we cannot deny the fact of its being a fever attacting women in the puerperal state. Yet it gives no correct idea of the true nature of the disease. We will therefor adopt the terms puerperal peritinitis or puerperal hysteritis or of the two together.

Considering the state of the patients constitution immediately after gestation the exciteument and fatigue of labour the altered and diminished tension of all the parts

contained within the abdomen and pelvis after parturition we should not feel surprised at the frequent occurrence of inflamation in those parts. The uterus having been suddenly reduced from the gravid to the non gravid state. It has thrown off the large mass of the placenta leaving the surface to which it had been attached raw and bleeding and requiring a sort of healing process. And nature has provided for the foetal circulation larger blood vessels and more of them in consequence of which there is a larger current of blood thrown to the uterine system than when in the non gravid state. Now seeing the surface to which the placenta has been

attached with its opened mouthed blood vessels requires the interbention of adhesive inflamation for the closure of these vessels and the healing of the placental surface. Which process requires ~~requires~~ a physiological congestion for its accomplishment. Knowing these important changes should we wonder at seeing a pathological congestion occasioned by the large supply of blood which by custom flows to the parts. And consequent upon this pathological congestion a suppression of the lochial discharge and the debellopment of inflamation constituting hysteritis And upon the same grounds of reasoning we may account for perotinitis for the parts covering the uterus

have been dimmished in tension to a flaccid condition & the blood vessels enlarged favouring the sanguine determination and congestion and consequently the development of inflamation.

And then is probably no membrane in the system in which inflamation so rapidly extends it's self as the serous membrane. And when we bring to mind the extensive surface which may be involved we should not wonder at the so often fatal results of the disease, but rather be made to wonder at seeing a case terminate in resolution of the inflamed parts. And seeing a case terminate thus is calculated to create within the mind of the

young physician an admiration of the wonderful resources of art capable of correcting these pathological changes.

The great extent may be known by computing the contents of that portion of the [redacted] serous membrane which invest the alimentary canal. which we will estimate to be forty feet in length. This being cut up from end to end would be at least four inches wide and forty feet long, affording a superficies of more than thirteen feet to which may be added that portion of the membrane which invest the liver the mesentery the meso colon and all the parts which derive from it their serous coverings.

This vast surface inflames rapidly and totally and passes through the stage of inflamation with extraordinary speed. And it cannot happen that it shal be extensively inflamed without a coincident exhibition of the greatest disorder in the functions of the organs which it invest.

For the peritineal coat of the stomach is as truely a part of the organ as its muscular or mucus coat. and the same is equally true to the liver and spleen and all the alimentary apparatus. Then a great puerperal peritonitis may be properly regarded as a complex inflamation of a vast number of organs indispensible to life.

Then why should we be astonished

to see the powers of the nervous
mass sink under the invasion
of causes of destruction so great
and so perading. And when in
addition to the extensive inflamation
and the constitutional irritation prod-
uced thereby we take into consideration
the great effusions and suppurations
which may ensue and the consequent
intermission of the organic funct-
ions, we have greater reason to seek
for the justest views of its nature
and the remedies most appropriate
for its cure.

It generally follows labour with-
in from two to four days. it may
occur either erlier or later it some-
times makes its attack before labour
begins and in other cases it is defered

until the second or third week of confinement or even later.

It often prevails epidemically in certain sections of country, attacking almost every woman who undergoes the process of labour.

During the Summer of 1854 it unfortunately become the painful duty of the unworthy writer of this article, to have to contend with it during its epidemic prevalence. in which almost every case of labour was followed in the course of from twenty four to forty eight hours by active inflamation. which was in some cases confined to the peritineum in some to the uterus and in others it was confined to them both. At the same time malarial

fevers were prevailing in the neighbourhood. attacking members of almost every family. Although there were many in whom malarial fever was not developed. yet the poison existed in the system impressing it and waiting for an opportunity to bring about its peculiar effect.

Now we believe that every case of puerperal fever which we witnessed during its prevalance. was not only complicated with malarial fever but were the effects of the malarial poison. and that the process of parturition and its consequent prostration opened up the way for the then impressing poison to bring about its peculiar

effects. Now it is gerally admited that during a paroxism of intermittant or remittant fever there is more or less congestion of the liver & spleen and stomach in consequence of which we must of necessity have congestion of the splenic vain the mesenteric vains and all the vains which when united form the portal vain. If the spleen only is congested we cannot so readily account for the congestion of the mesenteric vains. but if the liver is congested the blood from the portal vain cannot so readily permeate its structure and a mere knowledge of the anatomical relation between the portal vain and the

mesenteric veins will account for the congestion in the latter vessels. Now this of itself is almost sufficient to excite inflamation and frequently does independant of that state of the system which follows delivery. In which state as before stated we find the peritineum greatly reduced in tension more liable to become congested and inflamed. we also find the uterus irritable and its placental surface raw and healing slowly by a process of inflamation. which predisposes it to a higher and more diffusive inflamation. Then may we not be ~~exceedingly~~ more astonished at seeing a case of parturition

escape being followed by fatal inflamation. I have at seeing a puerperal woman labouring under a malarial poison fall a victim to its ravages.
What was remarkable in the cases that I saw there was no discoverable remisson in the disease. Which I attributed to the plethora of the patients when attacted and the rapid progress of the inflamation. Which was seated in that serous membrane the peritineum, notorious for its rapid diffusion of inflamation. and the consequent high reactionary fever which so much over powered the malarial fever as not to leave a symtom of its

existence, Where we have reason to suspect its epidemic existence, we should notify our pasturient patients of the fact. And direct them to preserve the horizontal position. so as to avoid that determination to the pelvic viscera which is consequent upon the erect posture. Their diet should be limited. avoiding all indigestable food and the bowels kept open. &c.

Especially is an observance of these rules of importance in malarial districts. not only after delivery. but preceeding labour.

But it is frequently the case that the case is submitted to the hands of a mid wife. and the physician

is not consulted until the inflamation has progressed considerably and the time elapsed for the proper preventative means to be available and the woman is doomed to fatal inflamation. Such is the fact as it accords with my limited experience in a neighbourhood monopolised by midwives.

About the first of September 1856 I was called to see Mrs H 48 hours after delivery which had been conducted by a mid wife in the neighbourhood. I found her labouring under extensive inflamation of the uterus and peritineum which had progressed rapidly for 24 hours before my arival. I adopted the usual antiphlogistic

plan of treatment with the use of auxiliary means. The inflamation continued unabated for 36 hours when a convulsion extinguished the flame of life.

On the same month I was requested to visit Mrs H found her labouring under active inflamation of the peritineum with which she was attacked 24 hours after delivery and 18 hours previous to my arrival. I adopted the usual plan of treatment. the inflamation gave no heed to my active efforts to stop it in its mad career. but continued its destructive inroads for 48 hours effusion ensued and the nervous mass was forced to succumb and death as a consequence.

About the 1st of October following I was called to see Mrs S. 36 hours after delivery. I found her labouring under a severe peritonitis with which she was attacked 12 hours previous to my arrival. I adopted pretty much the same plan of treatment as in the former cases and it terminated likewise fatal. Having taken no notes of the cases I have given them according to my best recollection. Some may be disposed to think that the disease was transmited by contagion and to avoid a conclusion of this kind I will state the fact that each of the cases of labour was conducted by different midwives. And it was their neglect of duty

and ingnorance of the perilous condition of their patients induced by malarial influence that sealed the fate of three lovely women, And after the disease had progressed to a point beond the reach of remedies. they were thsown into my hands, and I failed to save them. This produced horible feelings for me as a young physician to experiance during my initial steps into practice. For I knew that if I continued unsuccessful I would not only fail to distinguish myself as a physician but would sink into utter disrepute. And I began to wish I had never seen a medical book.

Fortunately for me the women who were expecting to be confined began to become alarmed about their condition and determined not to further patronise the midwives. And thus gave me an opportunity to put my preventative means into execution.

About the last of September I was called to see Mrs J. I found her labouring under intermittant fever. 8½ months advanced in pregnancy. She informed me that during each paroxism experienced pains which she compared to those of labour and that they were becoming more severe. And insisted that I should do something for her or she would certainly miscarry. I put her upon the

use of quinine with morphine and directed her to continue the occasional use of the quine up to the full term of gestation. the paroxisms did not return She went on to the full term gave birth to a healthy child and escaped puerperal fever.

About the 5th of october I was called to see Mrs G. said to be in labour on my arival She informed me that She had a chill a few hours before sending for me. and that She was attacked with labour pains. but had not approached the full term of utero. gestation. I ordered a mild cathartic and quinine to be given occasionally up to the time for labour to set

in She went on to full term and escaped puerperal fever.
I could mention several cases analagous to those above in which quinine was administered previous to labour and thereby prevented puerperal fever. The reason for this fact is very palpable. for its is known that quinine will cure intermittant fever, and that there is a relationship between the two diseases is undeniable from the fact that when malarial fever subsided puerperal fever subsided with it. And as quinine cures intermittant fever by expending its peculiar specific influence upon the system this influence may be kept up by an occasional use of it up to

the time of parturition. And thus afford a barrier to the uterus and peritoneum while in a condition favorable to congestion and inflammation. perhaps by preventing a paroxism which would certainly increase the congestion. for ubi irritacio ibi affluxus and the uterine system is in a high state of excitation.

After inflammation is properly established we can do but little with quinine unless there is a remission which rarely occurs in a genuine case in consequence of the rapid diffusion of the inflammation & high arterial excitement. It generally terminates either in resolution or effusion when the latter effect occurs it is

necessarily fatal.

I have been labouring to show that we may have puerperal fever predicated upon a malarial diathesis constituting what may be termed a malarial form of puerperal fever upon the same principle that we have a malarial form of dissentery. The great difference between the two being that the inflamation in the former is situated in naturally a more sensative membrane in which inflamation is more rapidly diffused and upon which it has a more extensive surface to display itself. And I conscienciously believe that in the great majority of instances where the disease prevails

epidemically it may be attributed to the existance of malarial poison. and not so much to contagion as some balieve. And the cans of the more fatal results of the diseas during it's epidemic prevalence may be attributed to the common causes in association with a malarial diathesis the tendency of which is to congest the internal organs. and especially the parts most irritable.

I do not wish to be understood as asserting that the epidemic prevalence of the diseas is invariably attributable to malarial influence but that such may be the case in malarial districts.

We have the Sporadic form

dependant upon the common causes mentioned in the preceeding part of this article. And the treatment adopted in any form is the active antiphlogistic plan. I imagine that it is scarcely possible to beat a case successfully without a deliberate use of the lancet in the early part of the disease by such a course we not only reduce the quantity of blood in the system and thereby lessen the fibrinous element but we gain a more ready action of our remedies. And if remedies are possessed of the various powers ascribed to them, we should certainly in this disease strive to facilitate

them in their action. Then we should bleed almost ad libitum, And to aid in a further reduction of the plastic material calomel should be administered in combination with opium & Specacuanha or calomel and dovers powder which not only has the capacity of retaining the remedy but it quiets the bowels keeps down irritation and is also diaphoretic in its action. The bowels should be kept regularly open with mild cathartics avoiding all drastic cathartics such as have the capacity to increas the peristaltic action of the bowels and thereby increas the irritation. The saline cathartics are best

adapted, which by their watery evacuations deplete from the immediate neighbourhood of the inflamed parts. We may also derive great advantage by the soothing effects of Anodynes. After proper depletion by the lancet and leeches over the region of the inflamation we may gain large advantage from the derivative effects of a large blister over the abdomen Sinapisms to the extremities &c. We frequently have to resort to stimulants such as wine and ammonia and often after all our active efforts the patient sinks & we are left of nothing to boast but of the Lords power to give & to take away.