

AN
INAUGURAL DISSERTATION

ON

Puerperal Fever.

SUBMITTED TO THE
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BY

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To

John M. Watson, M. D.

To whom I am indebted for whatever
I may know of Obstetrical Science,
These pages are respectfully inscribed

By

The Author.

Puerperal Fever

In tracing out its history we will find that this term was first employed by Astruc in the year, 1716 to designate the most fatal inflammatory disease to which lying-in women are liable. The name is now generally employed by writers on medicine synonymously with the terms child-bed fever, puerperal peritonitis, peritoneal fever, and epidemic fever of lying-in women. By examining the records of medicine we will find indubitable evidence that Puerperous women

have been liable to attacks of this
 destructive disease from the most remote
 periods of antiquity. In the works
 of the earlier authors we have but a
 short and imperfect history of
 this fever, and the particular atten-
 tion of Physicians was not attracted
 to it until about the middle of the
 seventeenth century, when it appeared
 as a malignant epidemic in the
 lying-in wards of the Hotel Dieu
 in Paris. Indeed so great was its ma-
 lignity that nearly all perished who
 were attacked by it. Since that time
 it has frequently made its appearance
 as an epidemic in nearly all the large
 cities and principal lying-in hospit-
 als of Europe. It very rarely if ever
 manifests itself as an epidemic in

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this country. The only record of the kind is by Dr Jackson, who says it was prevalent both in Northumberland and Sunbury in Pennsylvania in the autumn of 1817 and again in the spring of 1818, and though treated evidently with both vigor and ability about one half died. When it prevails, either in the epidemic or sporadic form, it does not seem to attack the poor and destitute any more frequently than those who are in affluent circumstances, for when it appears, says a distinguished author, one class is as liable to take it as another.

In our short and imperfect history of this disease we have said but little of the sporadic form, but we do say, and feel fully justified in

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the apertion, that this form of the disease is our Puerperal Fever, and the epidemic form is the European Puerperal Fever.

Symptoms. The first symptoms of this disease usually manifest themselves twenty four, forty eight or seventy two hours after the delivery of the woman, and sometimes, but very rarely, within the space of twelve hours. The symptoms manifest themselves in the following order, in the simple sporadic form. We have first a slight rigor or chill followed by a fever, slight pain in the lumbar region, intestinal colic which in a few hours affects the hypogastrium, the pain increasing gradually becomes more acute, concentrated pulse, moderate fever, lochia not

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suppressed, mammae flaccid, tongue
dry in the center, edges covered with
a yellow mucus, hicough and vomit-
ing of a green coloured matter. In addi-
tion to these constant and characteristic
symptoms, there is sometimes a diarrhoea
of a bilious glairy matter, a considerable
swelling of the hypogastrium, thirst
and remarkable retention of urine.

In the more complicated or epidemic
form the disease is ushered in by a
chill, the pyrexia is stronger than in
the simple form with exacerbations
rapid pulse, hot dry skin, severe pain
in the abdomen which occasions great
suffering when pressed upon.

These are the principal characteris-
tic or pathognomonic symptoms of this
disease, but unfortunately for the poor

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woman the chill which ushers in the disease is called a weed, and the pain in the abdomen is frequently looked upon by old women and grannies as after pains, and but little attention is paid them, and not unfrequently the disease is incurable before medical assistance is called in.

Dr. Gordon lays down these general principles by which it may always be distinguished from after pains. He says the pain of Puerperal Fever is constant, and after pains periodical; in Puerperal Fever the abdomen cannot be pressed upon without occasioning great pain; in after pains the abdomen is not painful to the touch; in Puerperal Fever the pulse is quick; in after

pains the pulse is not at all affected.

The seat of the pain varies somewhat in different patients, some complaining of pain in the hypogastrium, others again of a sharp pain darting from the pit of the stomach downwards and backwards toward the spine, and others again complain of severe pain in the right iliac region, or in the region of the right ovary. It is in this region Dr Gordon says that more than three fourths of his patients complained of pain. Some complain of pain in the lumbar region, or in popular phraseology the small of the back, others of severe pain in the lower extremities, which is often taken for rheumatism, which is another fatal cause of mistake.

The pain in whatever portion of the abdomen it may be situated, is so excruciating that patients describe their torture to be as great or greater, than they suffered during labor. The pulse is most frequently weak, though sometimes hard, and in the very beginning of the disease beats with an uncommon velocity, very seldom less than one hundred and forty per minute; and unless proper remedies have been used to check the disease, it increases in quickness till it exceeds one hundred and sixty strokes per minute; and often before death, becomes too quick to be numbered. In most cases there is more or less tumefaction of the abdomen, and more especially those that have been neglected, acquiring the size

of the abdomen before delivery. The tongue is white and soft, but in protracted cases it becomes rough and dry, resembling its condition in typhus. The urine is turbid and high coloured, and voided with great pain and difficulty, and sometimes total retention occurs. Partial sweats are very common, and are a mortal symptom when confined to the face and breast. When there is costiveness in this disease, there is more or less vomiting of bile, and in the last stage of the fever if there be symptoms of mortification, the patient is very apt to vomit a black dirty matter, not unlike that ejected in the last stage of Yellow Fever. Diarrhoea is another frequent symptom; and Gordon tells us it is

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rather to be desired than dreaded; for
without a spontaneous or artificial
diarrhoea very few recover. He farther
says the stools were frothy and of a
yellow greenish, or dark brown colour,
and every discharge by stool seemed
to give temporary relief; but toward the
end of the disease they were frequently
involuntary, and sometimes become black
and fetid resembling mop water. and
constitute one of the symptoms internal
mortification. The lochial discharge is
sometimes diminished, but in very
few is it entirely suppressed. There
is never any secretion of milk in those
cases that terminate fatally, and there
is none in those that recover until after
the crisis. Respiration is performed with
great difficulty as the disease advances.

This does not seem to be attributable to any disease in the thorax, but is caused by the mechanical pressure of the diaphragm and abdominal muscles on the inflamed viscera of the abdomen producing pain.

The intellectual faculties are very seldom affected in those that have had proper treatment; for says Dr Gordon I seldom observed a delirium except in a few improperly treated cases.

A few hours before death there is sometimes an effusion of water in the cavity of the abdomen. With this there is always a total cessation of pain, and while the patient is transported with the sudden transition from extreme pain to perfect ease, and over joyed with the thoughts of recovery, death comes by surprise and carries

her off amidst the congratulation
of her friends." Some however ^{have} a vio-
lent struggle and die in great agony.

Nature. That the disease consists essen-
tially in inflammation of one or more
of the structures concerned in the
processes of gestation and child birth,
the researches of modern morbid anat-
omists leave no room to doubt. The
peritoneal covering of the womb is prob-
ably the most frequent starting point
of the inflammation, from which
it may spread until the whole peri-
toneum becomes involved. Or the body
of the womb itself may be the seat
of the inflammatory process, or the
veins and lymphatics may take on
suppurative inflammation, and form

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the local disease upon which the constitutional symptoms depend. The inflammation is not necessarily confined, however, to any one of the various structures which enter into the composition of the organs of gestation. The morbid process may, in its progress, involve two or more of them, just ^{as} pulmonary inflammation may involve the pleura, parenchyma and air cells of the lungs.

Postmortem inspections have invariably revealed the traces of inflammation in one or more of the tissues, and yet there are those who contend that the disease is an idiopathic fever, and that the lesions are simply concomitants or complications, just as the le

sions of Peyer's glands are concomitants of typhoid fever. ~~When~~ ^{we} believe, however, this doctrine is at present advocated by but few. It is believed by many this inflammation is a specific disease resembling, or identical with erysipelas, and is contagious. The proof that it is contagious, when it occurs as an epidemic, is very strong and leaves no room to doubt that it is at least occasionally so.

Treatment. We will divide the treatment into two parts, viz. 1st The treatment of the Sporadic form. 2nd Treatment of the epidemic form. Restiveness is one of the first things to be overcome in our treatment of the simple form of the disease.

And that this may be overcome we always select those remedies which will act quickest, or produce an evacuation of the contents of the alimentary canal first. For this purpose clysters are generally used when we desire an immediate evacuation. A medicine of this kind will sometimes produce several force and active motions from the bowels. This is the great advantage the clyster has over almost all other remedies, in acting immediately.

We regard this as a very valuable remedy in the treatment of this form of this disease.

If the injection fail we should have immediate recourse to some other cathartic, more certain in its action. The next best, quickest and most certain in its action, is the *alum resin* given in one ounce, or half ounce doses, every two or three hours until three or four free evacuations have been ob-

tained. There is generally a cessation of pain after the action of the medicine.

Tartar emetic, or wine of antimony is sometimes used with great advantage given in small doses every two or three hours until they pass through the intestinal canal.

We are to judge by the strength of the patient, by the abatement of the pain and by the quantity and quality of the discharge of the evacuation necessary to the cure of the disease. After the evacuation a gentle diaphoresis may be encouraged by such medicines as neither heat nor bind the body, both of which are very injurious.

With this intention small doses of ipecac, tartar emetic, or wine of antimony, in combination with an opiate, may be given once or twice in twenty four hours. The patient should be at perfect rest, tranquil mind

and all news, whether bad or good, that would, either occasion uneasiness, or surprise should be concealed until the patients strength and firmness is entirely restored. Dr Hulme says. "The patient must strictly abstain from all caudle, spices, wine, spirituous waters, heating medicines and cordials of every kind, whether under the denomination of comforters, strengtheners, revivers, expellers of wind, promoters of the lochia, relieves of after pains, or under any other specious title whatever, which the good women are too apt to bestow upon them, and thus ignorantly administer to the destruction of the unhappy patient." The clothes of the patient should be changed frequently, for warm dry and clean ones. All kinds of bandages to the chest or abdomen must be carefully avoided for fear that their

prepsure upon the tender and inflamed viscera of the abdomen, may help to increase the disorder. As soon as the child is ~~draped~~ and put in bed, it should be placed at its mothers breast, in order to determine as much as possible from the uterus.

There is no doubt that if this was more particularly attended to, we would have less of this disease than we do, for the blood which ^{has} been flowing to the uterus during gestation, and which now ought to be determined to the breasts, is permitted to flow on, and the womb being engorged and thus remains, until a state of suppurative inflammation is induced, which may proceed till the whole peritonium is involved in the destructive process. Particular attention should be paid to the state of the bowels.

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even after the disorder seems to be par-
tially, or wholly relieved. On this subject
Dr Hulme holds the following language
"After the disorder is abated, or even af-
ter it seems to be gone off, particular atten-
tion must continue to be paid to the
state of the bowels. But the more ef-
fectually to prevent a return, and to re-
store the weakened bowels to their due
tone smaller quantities of chamomile
tea, or a slight infusion of juniper
berries may be drunk three or four times
a day, either by themselves or with a few
drops of the elixir vitrioli acidum.

After this a cooling opening diet with
fresh air, bark of Peru and gentle ex-
ercise will confirm the cure." We have
taken the principal portion of this treatment
from Dr Hulme who does not recommend

bloodletting. We think, however, that recourse should be had to it in all cases that are known to be Purpural Fever; at least we should treat all in this way.

2nd Treatment of the epidemic or complicated form. Gordon tells us that, ^{what} Boetius says of the plague is strictly applicable to Purpural Fever. That author says, "Bleeding proves more beneficial than all other remedies, provided it be seasonably used in due quantity; but I am of opinion it sometimes does no service, either because practitioners are too late in having recourse to it, or use it too sparingly, or commit some error in both these particulars. For if a disease which requires four pounds of blood to be taken away in order to cure it, and only one is taken away destroys the patient, it does not prove destructive because bleeding was used, but because it was performed

in an improper, and perhaps in an unseasonable manner. Dr Gordon ^{thinks} nothing more applicable than this is to Purpural Fever; for he says when he had the courage to take away twenty or twenty four ounces of blood at the first bleeding, his patients always recovered but when less than that, his patients always died. And we presume there are but few who have moral courage enough to take away twenty, or twenty four, ounces of blood from a woman who has passed through the violent throes of labor, and knowing the prejudices that are prevalent among the common people, and a great many physicians in regard to bleeding of such women. But we should so train ourselves that we would ^{do} anything for the welfare of our patient. This may seem a great deal of blood to take from a patient to those who are in the habit of taking away eight or ten ounces, but Hippocrates and Sydenham was

in the habit of bleeding ad deliquium anami in
fevers. After a bleeding of this kind we should
administer a brisk cathartic if there is no diar-
rhoea. There is sometimes a diarrhoea which
should be kept up, as this is the second great ob-
ject in view in the treatment of this most for-
midable disease. After venesection and purging
have been attended, an opiate may be given at
night in order that the patient rest well. Again
in the morning a gentle purgative should be given
that would cause two or three operations, and the
opiate at night should be continued until the pa-
tient is fully recovered. Gordon says "The purging,
therefore, is to be early, excited, and to be continued with-
out intermission, till there be a complete termina-
tion of the disease, which generally happens on the fifth
day." The very best purgatives we have in the treatment
of this disease are calomel and jalap, three grains
of the former to two scruples of the latter. This is

Gordon's prescription he says it should be made into a bolus which I always administered immediately after bleeding, without giving the least intimation of the intention of the medicine, either to the patient or her friends: "In this manner: says a distinguished author "I treated my patients, and the same method, if followed by others, will, I am confident, be attended with equal success. It may perhaps, be thought a secret method of cure, but I can assure, from extensive experience, that no other method will cure Purpural Fever. The cure is severe, but it is only short, for the patient is cured in a few days, or not at all."

"Vita mors vivit, aut aeterna vita"