

AN
INAUGURAL DISSERTATION
ON

Puerperal Fever

SUBMITTED TO THE
President, Board of Trustees, and Medical Faculty
OF THE

UNIVERSITY OF NASHVILLE,

FOR THE DEGREE OF
DOCTOR OF MEDICINE.

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OF

South Carolina

1858-59

MEDICAL JOURNAL OFFICE,
NASHVILLE.

Puerperal Fever

Of all the diseases to which the human system is liable, but few are more destructive in their character, or more rapid in their course, than puerperal fever. It destroys as many, or more women, than all the diseases, ^{and} accidents of parturition. Great discrepancy of opinion, regarding its pathology, treatment, &c, has existed, from its earliest notice, and this discrepancy has been the cause of doubt, and indecision, on questions of vital importance. Physicians formerly regarded child-bed fever, as a kind of typhus, depending upon a peculiar taint, or constitutional disturbance, but late writers have demonstrated most conclusively that there are decided lesions ~~xxx~~ in nearly all cases. Nor should

This appears at all strange or surprising when we reflect that the uterus after delivery is a kind of wounded organ to which inflammation may be imparted. When we consider the peculiar condition of the blood, the pressure of the fetus upon the surrounding organs, the injury done to the parts, and the congestion that must necessarily ^{follow} can we wonder any longer at inflammation being set up, and propagated from organ to organ until the whole abdominal contents are involved in the consuming flame. But puerperal fever may be sporadic, epidemic, contagious, or infectious; and under these forms require different treatment. The organs implicated are said to vary with the season, locality, and a variety of diseases prevalent; but in some of

The worst case no change has been found except fluid, and altered condition of the blood, similar to that of persons killed by lightning or hydrocyanic acid. It has been said there is scarcely a fever or inflammation but what it has to some extent resembles. The disease as it appears in this country is generally inflammatory and should be treated by antiphlogistics, but in those cases when the altered condition of the blood is the only change found antiphlogistics will not act well but if resorted to should be in the incipient stage of the disease. The uterus, its appendages, and the peritoneum are generally found inflamed. Pus is usually found in the veins after supuration begins, but this must follow unless the absorbents be obliterated.

Symptoms. Therpeutic fever may show itself previous to, or during labor, but usually appears between the second and fifth day. It is usually ushered in by a chill, often very slight, but in some cases very severe, followed by universal hot and dry skin, urgent Thirst and patient will swallow all fluids as if famishing for water.

These are usually accompanied by oppression at the precordist, vomiting, reaching, or nausea, abdominal pain either in the hypogastric region or in one of the iliac fossa, or both, soon diffusing over the whole abdomen, which is tense, tumid, and tympanitic, and considerable anxiety of mind.

The tongue is usually moist, and covered with a whitish coat, and "in some cases looks as if ^{it} had been

recently dusted over with a fine whitish powder" but as the disease advances it often becomes dry, rough, and sometimes covered with dark, or brown fur, and in some cases is clean, moist, and red. Respiration is hurried, short, laborious, and disturbed by short, dry, cough. Pulse from 120, to 140, and in some cases rise to 160 per minute.

In the majority of cases, soft, and compressible, sometimes hard and resisting, and in some small, and wiry. Skin usually hot and dry, but in some cases covered with profuse perspiration. At first the face is flushed, but soon becomes pale and livid, with wild and excited expression. The eyes are sunken, have a livid stripe under them, and in some cases suppuration takes place

in one, or both. The lips are pale, and parched. Secretion of milk checked, breasts usually sunken, and flaccid. Lochia generally suppressed, or flow in less quantity. Urine scanty, high colored, and passed with difficulty. Bowels usually constipated, but in some cases ~~is~~ diarrhea comes on very soon, usually after two or three days. Stools generally large, and have a dirty white appearance, and often mixed with scybula. Profuse sweating is a common, and distressing symptom. The sweat, and breath, has a peculiar, pus like odor. Tympanitis is one of the most common, and distressing symptoms, and soon rises to such an extent as to interfere with the action of the heart, and diaphragm. Ecchymosis occasionally appears. If the disease

still persists all the symptoms become aggravated, the face is pale, the skin is bathed in cold ^{clammy} perspiration, lips livid, and tumulous, features contracted, delirium occurs, and coma brings the final pest.

Black vomit sometimes attends, and usually when the uterus has been ruptured. Abdomen extremely tender to pressure. After the disease has continued for some time collections of pus may appear just under the skin, or may collect in organs of vital importance, and cause congestion in these organs. Anatomical Character. In this disease the seat of disease is undoubtedly in the peritoneum, uterus, its appendages, &c. Inflammation extends over the peritoneum which covers the

intestines, and the other sub-diaphragmatic viscera. The intestines are distended with gas, diminished in length, sometimes appear as if they were glued together, and when they become violently distended, cease to make their turns by arches, and bring on angulation, or complete closure of the intestines. The diaphragm, stomach, liver, and intestines, are often found inflamed. The tissues of the uterus, are generally changed in appearance. Sometimes the tissues are red, injected, lacerated, and infiltrated with pus; at others the organ is softened, putrescent, or there is abscess in its tissues, or in the broad ligaments. The ovaries are often red, softened, infiltrated, or filled with pus. The sub-peritoneal cellular

tissue of the uterus is infiltrated with a small quantity of white, or yellow pus, and often the surface of the organ ramified lymphatics, from the size of a thread, to that of a crow's quill are seen. They are seen at the neck, and on the inner surface, in the substance of the organ, in the broad ligaments, along the ovarian vessels, and in the cellular tissue of the lower pelvis. Very often the uterine veins, are found inflamed, and this may extend down to the hypogastric, iliac, and femoral, and upward to the hepatic, and vena cava. The downward inflammation will give rise to phlegmasia dolens, and the upward, to abscesses in the lungs, liver, spleen, purulent collection in the joints, collections

of pus under the skin, and Grisolle, has often observed plemisy in many such cases. Progress and Terminations
 Puerperal fever creeps on in a very insidious manner, the abdominal inflammation being masked by an oppressive languor and diminished sensibility of the nervous system. In these cases there is more phlebitis, than peritonitis, or phlebitis has gained the ascendancy. After delivery inflammation begins, and is propagated from organ to organ until the whole abdominal contents are implicated in a violent inflammation, accompanied by tympanitis, which continues its fatal course until respiration is in a great measure obstructed, As the blood can not ^{receive a} sufficient quantity of

oxygen to change venous, into arterial blood, consequently venous blood must be propagated into the arteries, hence the remarkable color of the skin, so often signalized in this disease.

Abdominal inflammation may terminate by effusion, which fluctuates under pressure. When suppuration continues any length of time pus is found in the blood, in the deputating organs, in some cases under the skin, and in the joints, and this is more common in phlebitis, as the pus is thrown out from the endangium immediately into the circulation, and propagated to these organs by the current. Violent distention often terminates in complete obstruction of the intestines. If the inflammation does not subside, toxemia

continuous, the lips, and nails, become blue, all pain ceases, the pulse grows small, treddy, and vermicular, ceases at the wrist, elbow, and axilla, and finally the heart ceases to pulsate.

Diagnosis The diagnosis in this disease is generally very easily made. The woman has a chill, followed by hot, and dry skin, abdomen tympanitic and tender to pressure, wild and excited expression, eyes sunken, with livid stripe under them, pulse quick and rapid, respiration quick, short, and laborious, and the woman is very indifferent to all surrounding objects. There may be some difficulty in the commencement in deciding whether it is puerperal, or ephemeral fever. In milk-fever, there is throbbing, irrita-

tion, and enlargement of the breasts, while in purpurial fever, the breasts are contracted and flaccid. And in purpurial fever there is more lassitude, urgent sickness, or nausea, and quicker pulse, than in ephemeral. In after-pains the abdomen usually bears pressure, but in purpurial fever the abdomen is sore, in all except in those masked cases. The abdomen is not tympanitic, pulse so quick, and rapid, heat of skin so great, nor so much depression, as in purpurial fever. In masked cases pressure upon the abdomen will often give evidence of inflammation. If the patient lie on her back, with feet drawn up, and if stretching them down give pain, accompanied by the other symptoms, you may be sure of the

inflammation. Armstrong relates cases in which the flesh was universally sore as in typhus. Wolf says when he has ^{a case} where the stools are of a dark color, resembling coffee grounds, very copious, of the consistence of thick gruel, and of a fetid smell, that he is confident it is one that requires more than ordinary activity of treatment. Cystitis may be complicated with purpural fever, but this is known by burning, throbbing, pain, fulness, and oppression in the region of the uterus, frequent and difficult micturition, with violent pain in the back, thighs, and groin, very much increased by the erect posture, and confined to the lower part of the abdomen. When the disease assumes

The form of phlebitis, it will be more rapid in its course, as vital depression will come on much sooner, or it is so insidious in its nature, that the physician can not determine until the golden moment has passed. This is not the case as the other forms but tymparitis, abdominal pain, flatulency of stomach, and angulation of bowels, will not be so great, but the nervous shock will be greater, and fatal collapse will come on much sooner as the pus is thrown immediately into the circulation, and propelled by the current of blood, scattering the poison through the whole system, and often collects in vital organs, when it appears in abscesses of various sizes, and in many cases state the destiny of the

tortured patient. Sometimes the ^{symptoms} cerebral, are so severe as to mask the uterine disorder, under this form the disease assumes a lower form, or is sooner brought on than in other forms of the disease.

Prognosis This from its earliest notice has been regarded as one of the most fatal diseases to which the human system is liable. We are told of many epidemics in which nearly every patient died. The celebrated Wm Hunter saved one patient out of 32. Seake saved 13, out of 19. Gordon saved 23, out of 27, and Pley of Leeds, saved 10 out of 13, but afterwards resorted to anti-phlogistic, and saved only two out of 30. The mortality in the great hospitals of Vienna has been reduced in a few years from one in 10, to one in 74, of the

mothers delivered. The statistics of
 England, and Wales from 1847-55, show
 that 25,808 mothers died in childbed,
 of them, 8,154 died of puerperal fever.
 Over 1,000 die annually of this disease.
 It is much more fatal under its epi-
 demic, than its sporadic form. When
 the patient can be seen in the incip-
 ient stage, and the proper remedies
 resorted to, the disease can be jugula-
 ted, but from the insidious nature,
 it is too often the case that the phys-
 ician is not called until the disease
 has run a fatal course. When pain
 leaves the abdomen, and fluctuation
 can be felt, the patient's doom is al-
 most universally death. The earlier
 the disease comes on after delivery the
 greater the danger. Rigors after the
 disease has continued twenty four

hours are alarming. Free, open, condi-
tion of the bowels, either previous or
subsequent to delivery is a favourable
symptom, and often mitigates the
ravages of the disease. McClinton
of the Dublin Lying-in Hospital,
says in the epidemic as it prevailed
there in 1855, he regarded the tongue
as one of the most valuable prognostic
symptoms. He says with one exception
he never saw a patient recover when the
tongue become dry, and brown, or glazed,
When pulse come down, respiration be-
come slow, and easy, tongue clean off,
Tympanitis disappear, or subside, se-
cretion of milk appear, lochia begin
to flow, the patient may be regarded
as in a favourable condition, but
even here every attention should be
paid as the disease may be renewed

and death be the consequences, or some fatal sequel be set up, and hectic with all of its horrors be the result.

Cause The cause of purpural fever has been and still remains a vexed question. In most of the epidemics Typhus, or some of the eruptive diseases, prevailed at the same time, and in some they have been noticed to commence together, arrive at their acme together, and decline together.

The cause of these epidemics is some peculiar atmospheric change, and now that the blood, and organs, are in an inflammatory condition, this may ignite the inflammation in some of these injured, and predisposed organs, and then the inflammation may be propagated by contagious sympathy until the whole

abdominal contents are implicated.

Like Typhus, these epidemics usually appear during cold and wet seasons as ventilation is then very bad, especially among the poor, and crowded, where these miserable creatures are all crowded together, and are compelled to close every opening through which the penetrating air can reach their ill clad bodies. Sporadic cases may be caused by collections of putrescent matter in the uterus, or vagina, retained coagula of blood, putrescent lochia, injury to the parts, morbid retention of feces, too much heat of the parts, stimulants taken internally, and by rising from bed too soon. It is said that it has been caused by the effluvia arising from dissecting rooms, persons making autopsies.

and delivering women soon after, and by exposure to typhus, erysipelas, hospital gangrene, putrid sore throat, &c, after which it may become contagious and be conveyed by the accoucher from patient to patient - when ever he may be called to deliver women.

Some writers say it will cause putrid sore throat, erysipelas, &c, in the male attendants, and, M. Depaul relates the case of a woman a virgin who attended a woman in puerperal fever and died with all the symptoms of that disease.

She died in forty eight hours, and at the autopsy the changes usually observed in cases of this nature were found. Puerperal fever under peculiar circumstances does become contagious, and may be conveyed by the clothing, of the physician, but these have been removed, every precaution

Taken, and still the disease appears.
 In explanation of these cases, Wm Tyler Smith, accoucher to St Marys hospital, says the blood of the accoucher acts as the medium, that the air breathed unites the circulations, and renders them as it were one. As evidence he refers to cases of Small-pox in the fetus in utero, where the mothers have had the disease before and during their pregnancy no evidence existed that they were in the slightest degree effected." In these cases the blood is the only medium by which the virus could be conveyed, and why not purpural fever be conveyed in the same way as it is in an analogous case?

Prevention. As prevention is far preferable to cure, every means in the power of the physician that will give the

patient the slightest advantage of a doubt should be used to the best advantage. This should commence previous, and subsequent to delivery. Habits should be regular, costiveness prevented, apartment should be well ventilated, and excluded from persons suffering from erysipelas, gangrene, scarlet fever, putrid sore throat, &c. All morbid secretions should be removed.

After the accouché has been exposed to the disease, he should change his clothing, expose them to the fumes of chlorine, use daily ablutions, and wash his hands in solution of chloride of lime, or soda, before and after every vaginal examination. Persons engaged in anatomical investigation should not attend purperal women. Iron, quinine, and several of the tonics, have been recommended as prophylactics. Dr Smith

has great confidence in the chloride of potash, given in doses from five to ten grains three times per day. The Physicians' energies should be untiring, and his attempts at prevention should cease only when the disease is established.

Treatment: As the disease prevails in this country is generally inflammatory, and requires antiphlogistic treatment. When it assumes this form and the physician is called in the incipient stage, the lancet is the great anchor of hope; but every case should be individualised, and treated accordingly. In an inflammatory attack venesection should be resorted to at once, and continued until the effect is sufficient to counteract the inflammation. If symptoms indicate it should be resorted to again and again

until inflammation is subdued, or passes into the second stage; after which will become injurious. The disease is often jugulated by one copious bleeding. During the venesection the patient should assume the erect posture, as the effect will be greater without the loss of so much blood. One copious bleeding to incipient syncope, will be more beneficial than many small ones often repeated. This should be followed by free, and a copious purging. For this a great many medicines have been recommended, but perhaps calomel is best, from its well known antiphlogistic powers. From 10, to 20 grs. should be administered immediately after venesection, followed by some of the saline cathartics. Spirits of turpentine with equal

quantity of castor oil produces few
and copious discharges, and often
relieves many of the most distressing
symptoms. This medicine has
of late years been much used, and
it is said with great satisfaction,
but I would prefer Calomel followed
by some of the saline cathartics for
the reason given above. Baratrum
viride is undoubtedly a valuable ag-
ent in this disease. In those cases
when the pulses are very frequent, skin
hot and dry, this can be used to great
advantage, and I would prefer it
to the antimony. Leeches may be
applied to the abdomen, or preferable
to the parts themselves. Cupping
will not answer well as the abdomen
is too flaccid for the proper application
of the glasses, and they would cau-

or unnecessary pain. In some cases emetics can be used to advantage as the patient can scarcely undergo the effect without being thrown into free and copious perspiration, and this with its sedative effect may subdue the incipient inflammation. Stupor may be used when the abdominal pain is severe as they often remove these troublesome symptoms and give ease and repose to the patient.

Flannel dipped into warm water and laid over the whole abdomen often give ease and bring on free perspiration. Emollient & pultices such as that made of the bark of the slippery elm, &c, are valuable. Blisters, doubtful, but when used perhaps is best to apply them to the inner side

of the thighs. Opium in some of its forms should be given to allay pain, and tranquillise the patient, and for this Laudanum, and black drop, is best. In all cases when calomel is given, a grain or two of opium should be added. In some cases opium has been relied on alone in the treatment of this disease. A. Clark of New-York relates a case where the patient took during the second twenty four hours after the attack, 4,72 grains. He says no practice can be better, and that his professional friends have found it equally successful. Emetics are valuable as they discharge the contents of the lower bowels, act as revalents, and often give vent to the pent up gas, which will remove the fatal angy-

lation. For this perhaps nothing is better than one made of an ounce of castor oil, with half an ounce of spirits of turpentine, made into an emulsion with mucilage and water. In the latter stage the patient must be strictly forbidden to rise to evacuate the bowels. When collapse comes on, or effusion begins, the golden moment is past when the means might have been used to defeat the fatal foe, and the patient must as a general thing succumb to the fatal enemy, but the physicians attempts to cure should cease only with the death of the patient. Stimulants must be administered, pain be eased, life prolonged if not saved. The nervous system must be supported, wine, brandy, quinine, ammonia, ether, and animal matter,

must be administered. In the diarr-
 hea that usually appears in the
 latter stage of this disease, starch and
 Landamm injections will be ben-
 efiticial, and will often give to the tortur-
 ed patient much ease and comfort,
 when life cannot be saved. Opiates
 should be given to tranquilise pain,
 Painful joints bathed in some
 of the opiate embrocations, and
 for this chloroform liniment has
 been highly extolled. Collections of
 pus near the surface should be
 punctured, and discharged, and
 collections in organs of vital
 importance should be met by
 appropriate remedies, &c., &c., &c.