

AN

INAUGURAL DISSERTATION,

ON

Anemia Gravidarum

SUBMITTED TO THE

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FOR THE DEGREE OF

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BY

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Anemia Gravidarum

Every obstetrical writer mentions plethora connected with pregnancy as the source of some of those diseases which, when they occur, so often compromise the safety of both mother and child. Much has been said about it, and so little about anemia, that it has been and is yet considered by some practitioners as the almost constant complication of pregnancy. When in fact the great majority of diseases connected with pregnancy are purely anemic, there are not a few women who, in the pregnant state, become affected with seeming disease of the heart characterized by irregular action

of that organ, and a puffy flabby appearance of the muscular tissue.

Which I conceive to be nothing more than characteristics of anemia. A pregnant woman should pass through the whole of her gestation without any feeling of disease; and many women do, conceive, develop, and bear their children without any apparent change of health or comfort. But there are some constitutions, on which the influence of pregnancy is disastrous in the extreme, constitutions, in which the gestation seems to be a direful effort of the life forces that they can scarcely carry out. They are, often unable to perfect,

and when perfected it is often at the
expense of the woman's health, yes,
her life. A woman who develops a
child requires an augmentation
of her hematosic power, indeed,
she requires it for the maintenance
of her own constitution when
the life force is exerted with a
preternatural energy. The laborer
requires more food than the idler
so does the woman who not only
maintains her own development
but has to furnish materials for
the development of her child.

Now this augmented development
must be at the expense of the nervous
constitution or power of the nervous
matter. Some constitutions furnish

it without the least faltering of the nerve force, while others suffer the greatest detriment in doing so.

When the Nervous system becomes affected by these efforts it will be most likely to show its affection in some diminution of its power, and that diminution will be most likely to manifest itself in the specific tissues that are most immediately subservient to the supererogatory demands of the gestation. Inasmuch as all development takes place at the expense of the blood, of which the consumption and waste is very great in the progress of a gestation, it is not unphilosophical I think, to suppose that the tissue most likely to suffer is that that the blood is

in contact with, or blood membrane,
When this membrane in consequence of excessive exertion of its faculties, becomes weakened or diminished as to functional force, then we shall have an imperfect blood. The blood becomes imperfect in regard to the proportion of its solid constituents, which are diminished while the watery part is abnormally increased, and this hydreemic condition of the blood constitutes anemia.

The excessive action into which the heart is constantly thrown by the calls from the capillaries for a fresh and more rapid current of blood to supply the deficiency of nutritive material leads to its

enlargement, while defective Nutrition renders it soft and flabby.

Hence the great demand for a perfect blood viz blood containing of 210. solid constituents, and 490 water, is capable of taking out of the respired air in the lungs the amount of oxygen required by the constitution of the individual, greater or less according to the exigencies of it under action or repose, whether physical, or Mental. Such a blood can take from the atmosphere any quantity of oxygen required since it being perfect is in a fit condition to take up a supply equal to the demands. Though the solid contents of the blood be reduced and the aqueous element

be increased in proportion, it will still be capable of taking oxygen out of the respired air in the Lungs, but incapable of taking a supply equal to the demand. Therefore, when the Nervous Mass would send down its stream of biotic force to the distal points in the organs, those streams will be feeble, irregular and incompetent to the perfect manifestations which are required to constitute a healthful play of the said organs. This is evidently the case with regard to all highly anemical patients, whose debility is evinced in the Muscular energy, also in an imperfectness and irregularity of their sensational, nutritive, and secretory forces. For the circulation the

respiration and the innervation
constitute a trinity of forces
mutually dependant one upon
the other. So in anemia, the lungs,
the Brain, and the heart, are all
in a pathological condition the
prime element of mischief consist-
ing in a diminished crassis of the
Blood, and the Blood is the fluid
body and the body is the fixed and
rigid blood, Now a woman, whose
lungs, heart, and Brain are disordered
by anemia, goes through her pregna-
ncy with difficulty and hazard
and becomes the early subject of
those infiltrations of the cellular
tissue denominated Edema.
A woman in this condition or

under those circumstances becomes more or less emaciated, though her cellular tissue at the time be infiltrated with serum or watery giving her the appearance of an embonpoint very likely to deceive the incautious diagnosticator,

Here we have great irregularity in the heart's action, such as palpitation great augmentation of the superficial pulsation, dyspnoea, orthopnoea, paleness, and convulsions with sudden loss of sight and hearing.

Generally followed in turn by oedema and true anasarca.

The pulse from the least motion or emotion become quickened large gaseous, unsteady and very

sudden, though not like that of the hypertrophied heart, which is quick stern, wavelike, and lasting. Place the anemic patient in a recumbent state of rest and you will ^{have} that abnormal pulse of 140 or 50 soon reduced to its normal beat of 85 or 90 to the minute.

The face and whole surface becomes sallow pale and flabby, the cornea nearly uncovered by the upper palpebra. Respiration is generally troubled, and from the least exertion or emotion it becomes precipitate and difficult. Towards the close of the gestation the lower extremities become considerably infiltrated, and the power of muscular

Motion is much curtailed in consequence of its always being attended with violent beating of the heart, and throbbing of the carotids, flushes of heat, breathlessness, and uneasy sensations in the head, such as painfulness, vertigo, with buzzing sound, and dimness of sight. It is not unfrequently the case that when the woman attempts to walk about the room she falls on the floor in a state of insensibility and for a while be absolutely pale, and scarcely able to speak, with a complete blindness. Though the eyes may be bright and the pupils natural they are wholly without sight.

As the full term of gestation approaches, the swelling increases affecting the thighs, buttocks and labia; The pericardium not unfrequently becomes the seat of a dropsical effusion so that a complete orthopnoea soon declares itself. Then we have difficulty of breathing when in the horizontal posture, so much so that they have to be propped up with pillows or cushions and frequently seek relief by leaning against the bed post and find it as comfortable a position as they can get, for the suppression cannot be entirely relieved by any position, until the woman is

cured. Sometimes there is a sallow
waxen aspect of the face and with
this, a puffiness especially of the
eyelids, The skin becomes translu-
cent so when the fingers are held up,
the light shines through the edges.
In the progress of pregnancy we have
some or all of those symptoms in
an aggravated form, to a greater or
less extent. Should this disease
continue long, and be improperly
treated, it is apt to induce general
dropsy, organic disease of the heart &c.
The immediate causes are either
such as directly detract from the
amount of blood, or such as dimin-
ish its healthy production.
Diseases of the blood membrane,

produced from various causes will materially deteriorate the blood. Frequent bleedings repeated at short intervals, Spontaneous hemorrhages constantly recurring such as hæmeme-
mesis, menorrhagia and the hæmorrhoidal flux, Excessive secretory discharges especially from the bowels and uterus. Then we may have as a second set of causes un-
due and indigestible articles of food out of which the blood is elaborated producing a derangement in the process of digestion, and sanguification all having a tendency to deterioration. The abuse of coffee, or excessive drinking even of cold water, connected with sedentary habits

are calculated to disturb the healthy action. So does the reverse habits such as prolonged overexertion, debilitating agencies of every description, also depressing emotions, grief disappointment, ambition, or business.

concealed and unanswered affections, great mental anxieties of all kinds are calculated in their nature to produce anemia.

The treatment of this affection is plain and simple to the reflecting mind. After properly diagnosing the case no one would think for a moment of using the lancet to overcome or even relieve the symptoms set forth. Instead of that we would prescribe recumbent

rest a light and nutritious diet with some tonic to repair the waste. So soon as the patient is able she should exercise in the free open air, for exercise and fresh air loaded with oxygen are the staples in keeping up the charcoal fire that is going on constantly in the lungs, and the slow combustion in the system.

As to the diet, it should be frequently changed in order to stimulate the bowels so as to keep up the regular peristaltic action.

The tonic used, may be vegetable or mineral, The mineral acids, answer a very good purpose in slight cases. But we think the

ferruginous preparations by far,
the most preferable, of these the
sulphate carbonate and muriate
are the most frequently used, if
you please you may add a small
portion of Quinine, or Gentian,
to those preparation.

What we conceive to be still
better is the metallic preparation,
that of Iron by Hydrogen.

Should the liver be torped an
occasional blue pill may be
administered or enough of the
Extract of taraxicum added to
the Iron to keep up the action
of that organ.

Some practitioners are opposed
to the administration of Iron

to pregnant women under any circumstances. But we believe it to be a sine qua non in the cure of this disease as much so as bleeding, is in a high state of plethora.

Should congestion occur, it will generally be speedily relieved by cold applications to the part, counter-irritants and rest. All nervous symptoms, should be allayed by some anodyne. If in the progress of the disease the patient should suffer an attack of hysterical convulsions they should be treated with the foetid gums, the asafoetida, Musk, and Opium in some form.

A fine preparation is made by
adding one eighth of a grain of the
acetate of Morphine to half a drach-
m of Hoffmann's anodyne for
a dose. Or what is still better
is the ethereal extract of valerian
I know of no remedy so well
calculated in its properties to
procure the desired relief in those
paroxysms of convulsions.

By the proper use of those me-
ans we will be able to restore
in a short time the woman to
her natural health, and give
life to the eye that now looks
as if there was no life there, and
bring back those ruby lips, and
rosy cheeks, and instead of that

sallow ghastly appearance, we will have that of a pink, yes a complete paragon of health and beauty.

By the timely use of those means the woman will be safely conducted through her Labour and her and child both do well,

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