AN INAUGURAL DISSERTATION
ON
Emansio Mensium.

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BY
Erasmus P. Booth
OF
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To

John M. Watson, M.D.,
For
His Superior Ability, Untiring Energy, and Indefatigable Industry In Teaching
The Science And Art
Of Midwifery
And All Things Connected Therewith,
These Pages Are Respectfully Inscribed
By
The Author.
Emansio Mensium.

Definition. — This name is usually applied to that form of aminorrhoea in young girls who have never menstruated, although they have attained the age at which the function of menstruation is ordinarily established.

From numerous statistics furnished us by various authors, it appears that a large majority of females begin to menstruate between the fourteenth and fifteenth years. But exceptions to this rule are by no means rare. Occasionally, girls become regular at a much earlier period, and more frequently perhaps, that event is delayed beyond the ordinary time, and that without any impairment of health. These latter cases must not be regarded as instances of aminorrhoea; for, unless there be an effort on the part of the system to set up the function at the regular period, its delay beyond that
Time ought never to be looked upon in the light of disease, as such a view would lead to the administration of harsh and injurious drugs. This error is common among those unprofessional; and it is to be feared that the profession itself is not altogether free from it.

This form of amenorrhea may depend upon various conditions involving one or more of the organs of generation only, or to a greater or less extent, the whole economy; the subject may therefore be properly treated—under the three following general heads, viz:

1. That variety dependent upon the absence, malformation or disease of one or more of the uterine organs.

2. That in which there is no discoverable deformity, but which depends upon a pithoric condition of the general system.

3. That in which an opposite state,
That is, amenorrhea obtains.

1. Amenorrhea may be considered due to absence, malformation, or disease of one or more of the generative organs. This may be divided into two following subvarieties, viz:—

a. That in which from deficiency of certain parts, as the ovaries or uterus, there is no elimination of the menstrual fluid from the circulation.

b. That in which the menstrual fluid has been eliminated from the general circulation, but is retained in the cavity of the uterus in consequence of some obstruction to its outward passage.

a. First subvariety. — These cases, which are of a hopeless character, are, fortunately for the gentler sex, but rarely met with. Physiologists, I believe, are now pretty generally, if not universally, agreed in the doctrine that, the presence of the ovaries in a healthy condition is not only
essential to the act of conception, but that menstruation is inseparably connected with, and dependent upon, the periodical changes which take place in them. This conclusion is supported by the facts: first, that the ovaries are not developed till puberty; secondly, in females who have passed the critical period of life, they are always found in an atrophied condition; and lastly, in cases where these organs have been known to be destroyed by disease or an operation, menstruation has entirely ceased, although previously to their destruction, that function may have been regularly performed. If additional proof were desired, we have it in the fact—in cases of protracted amenorrhea terminating in death, post mortem examinations have revealed the absence of ovaries.

This defect may be either congenital or the result of disease.
Females in whom this malformation exists present a masculine appearance: the mammae are but poorly developed; straggling hairs, or a slight beard grows upon the upper lip; the voice is deeper than usual; and the sexual appetite is wholly absent.

As to the general health, judging from the statements of different authors, it may or may not suffer from this local defect. Dr. Churchill says "they may have the body generally well developed, and healthy; the circulation active and regular; and all the organic functions (save one) well performed;" and on the other hand, Dr. Ashwell assures us "the health often suffers; and there is promiscuity, either to irritability and excitement, or torpor and depression."

The uterus has been known to be absent; and many such cases are on record. Of course, there can be no elimination of the catamenia in the absence of the womb, since it is the organ by which that fluid is separated from the cur-
current of the circulation. The presence of the womb does not seem to be necessary to a fair development in other respects, as several cases on record will show: the sexual appetite may be, and most probably is, in the majority of cases, normal, or at any rate is not wanting, as we have seen is the case in the absence of the ovaries.

In both these varieties of malformation, or when they occur coincidentally, as sometimes happening there is no periodical effort at menstruation: and should we meet with a case in which the menstrual flux was delayed for a great while, and then were no menstrual menstruation, we would probably be right in supposing the case to be one of absence of the ovaries or uterus; of the former, should the patient present the masculine appearance, and other peculiarities already mentioned as characteristic of such persons,
and of the latter, if the patient present the outward characters of her sex. But in all such cases, we should confine, or correct our opinions if possible, by a manual examination, before giving advice, or instituting a course of treatment. This may generally be done by the introduction of one hand per vaginam or per rectum, assisted by the other applied to the abdominal walls over the region to be examined.

To repeat what has been already said, these are hopeless cases; and no means, within our power, can remedy the evil condition of the organs, or establish the function which it is their business to perform: and this fact, as melancholy as it is, should be made known to the patient; for fear she should, unadvisedly, enter into relations which must thus necessarily, be emblittered to all concerned.

b. Second subvariety.—The escape of the
menstrual fluid from the womb, along the vagina, and through the vulva, may be prevented by any of the following conditions of the passages which it traverses in a normal and healthy condition of the parts, viz:—The cervix uteri may not be developed; or its canal may be impervious; or the os may be closed by a membrane. The vagina may be deficient in its upper part, or altogether wanting, a thin layer of cellular tissue only, intervening between the rectum and bladder: or if there be a vagina, it may be rendered impervious by adhesion of its walls, or a membrane stretched across it; or solid growths may fill up and exclude some portion of its canal. Finally, all these parts being in a normal condition, the labia may adhere together, and prevent the escape of the menses; or they may be dammed up behind an imperforate hymen.

The symptoms in such cases will at first, be the same as those observed in healthy girls in whom the
mestral sensation is being established, except that
there will be no flow of the catamenial secretion ex-
ternally. At periods of about twenty-eight days, as a gen-
eral thing, the patient experiences a feeling of general in-
disposition, and has pain in the back extending down
into the thighs; there is a sense of weight in the pel-
vis; she will probably complain of headache; and there
is a dark or purple color of the integument be-
neath the lower eyelids.

These symptoms will, at first, persist for several days,
and then pass off, and the patient may feel pretty
well till the next regular period. But at each successive
occurrence of the menstrual motions, the symptoms beco-
me more and still more aggravated; the pain in the ba-
k and loins becomes more severe, and "bearing down"
pains, resembling those of the first stage of labor, are
added to the patient's sufferings; and with these are also
conjoined severe and tormenting abdominal pains. The
patient's general health at length begins to suffer, and
pasi passu, with the menstrual accumulation grows worse. The outward signs of pregnancy are present, but she loses her appetite, and becomes pale, feeble and emaciated. As the menstrual fluid accumulates in the uterus the abdomen enlarges, and becomes tender. In this condition of things, the organs concerned being embarrassed by the fluids pent up in and about them, and pressing injuriously upon them, or they participating in the derangement produced by the local obstruction, the menstrual fluid may cease to be exhaled into the womb, and that which has already accumulated be in part, or entirely removed by absorption. Or if the fluid continues to be poured into the womb, the tension of the structures is increased; and ultimately, if no means be employed to relieve it, the walls of uterus may give way, and allow the escape of its contents into the peritoneal cavity, and set up fatal inflammation of its lining membrane; though this result we think, very
nearly occurs, if indeed it can occur at all, since the gradual accumulation would give time for the development of the uterine walls, such as takes place in pregnancy, and all conditions in which the uterus is slowly and gradually distended. A more probable termination of such a case would be death from disease induced by pressure upon important organs by accumulating fluids, and the consequent distension of its containing organs.

The prognosis of these cases depends mainly upon the nature of the obstruction to the escape of the menses. If it is such as may be removed without any great risk of inflammation of the peritoneum or other important structures, the result will in all probability be favorable. If, on the other hand, any operation should be required, which will involve danger to any important neighbouring parts, and especially the peritoneum, a more guarded prognosis should be given.
Treatment. These cases can only be relieved by surgical or mechanical expedients; and the
sternum will have to be modified according to circumstances of each individual case. No rule can be
laid down sufficiently comprehensive and definite to govern in all cases; we will therefore only indicate
the modes of relief usually adopted. In the simpler cases, where the obstruction consists in a
membranous septum across the vagina, or simple occlusion of the os uteri, or in which the fluid
is retained by imperforate hymen, it may be easily remedied by any means by which the obstruction
can be removed. For this purpose, the knife may be required; or a bougie, or even the finger,
may be sufficient to overcome the obstacle, and give exit to the fluid gathered behind it. If the
cervical canal be wanting, an artificial one may be formed by the passage of a stent through the
center of the cervix. In regard to the more
serious cases that occasionally occur, and which any practitioner may be called upon to treat, such as complete absence of the vagina, or extensive atresia of its walls, or any other condition of the parts which would require an extensive incision to reach the mouth of the uterus, it is sufficient to remark, that the practitioner should never attempt an operation without the best advice he can obtain, and a due consideration of all the difficulties that may arise in the case. If the danger from accumulation becomes eminent, and no other means of relief can be employed, the womb may be punctured from the rectum.

In the simplest of these operations the patient requires to be watched, and the first symptoms of serious inflammation, and especially of peritonitis, vigorously combated. If the indications of inflammation be slight, mild
antiphlogistic measures will suffice: but, should
great abdominal tenderness, and other con-
comitant symptoms indicate peritonitis, copi-
ous bloodletting, repeated if necessary, should
precede the milder measures.

If the operation succeed, as it will gener-
ally do, in the simpler class of cases, it will be
followed by the escape of a "dark unevagulated se-
cretion", which, after the first gush, if the pas-
sage made for it be large, will continue to di-
minish for several days, and finally, disappear;
and if no accident occur, the subsequent menstrua-
tion will be regular and healthy.

According to our division of the subject, the
next variety which we have to notice is

II. That in which there exists no discoverable
malformation, but which depends upon general plethora.

This variety usually occurs in those of the sanguin
temperament, and who are in the habit of full and
luxurious living—young girls of florid complexion and plumpness of form. This bodily condition predisposes to congestions of various organs, and among the rest, the womb and the uterine organs are prone to suffer; and this would be more likely to occur when these organs are undergoing that remarkable change that takes place in them at the period of puberty.

Symptoms.—These, to be brief, are headache, flushing of the countenance, a sense of fullness and tension about the brain, aggravated by the pulsations of the arteries producing throbbing in the head; there is more or less of lassitude; and often slight feverishness, though the pulse is but little, if at all accelerated, except in nervous and excitable patients. The circulation is often unequal or irregular, as evinced by the coldness of one foot or hand while the other is hot, or both being alternately hot and cold. The state of the skin is by no means constant, being sometimes
dry and harsh, and at others, or in other patients, it will exhibit that condition best described by the word clamminess. Along with these symptoms there will be pain in the back and pelvic regions; and not unfrequently, there is obscure tenderness over one or both ovaries.

These symptoms may, at first, entirely disappear after the menstrual menses; but when the disease has persisted for some time, they will continue, though perhaps with abated severity, during the intervals between the menstrual efforts. If the menstrual discharge be not established either with or without the aid of the physician, the general feebleness and robust health of the patient may begin to give way; and finally, the opposite state of things will take their place; and the patient will labor under that more serious disease, known as greensickness or Chlorosis. Or instead of this same vital organ, as the lungs or liver, may become
The seat of chronic disease, and the patient become a victim to phthisis, or some other equally formidable affection.

Treatment. — The first indication to be fulfilled in the treatment of this form of amenorrhoea, is to reduce the general plethora upon which it depends. This may be done by bloodletting, purgation, ample diet, and moderate exercise. As a general rule, general bloodletting will not be required. If any important organ, such as the brain, lungs, or liver show signs of congestion, it should be promptly met by venesection to such an extent as the symptoms may demand. But, for the headache, and pain in the back and thighs, local depletion will in most instances suffice. Cups may be applied to the sacrum or small of the back; or leeches to the inside of the thighs, in the groins, to the labia, or os uteri. Purgatives should not be omitted. Of these, the practitioner can choose
between jalap, aloe, senega, aloes, and rhubarb; or a combination of two or more of
them, may be preferred. A small proportion
of colonel might occasionally be combined
with them, and prove beneficial by improving
the secretions. The purgatives mentioned are
preferred on account of their tendency to the
lower bowels, which they unload and stimulate.
They must be suited in their activity, and the fre-
quency of their administration, to the urgency
of the symptoms of each case. While these
are being given, certain auxiliary means, such
as the mustard hip-bath, regular but moderate
exercise, and sparse diet, are not to be neglected;
for they will assist very much in bringing
about a healthy state of things. If, after the
general fulness has been reduced, and local con-
gestion, if any, broken up by the means already
enumerated, the menstrual discharge still does
not make its appearance, and especially, if the pa-
tient seem to be passing to the opposite condition, i.e. Chlorosis, those remedies classed as emmenag-
ogues may be cautiously administered. Such
remedies it should always be remembered, are
only adapted to cases in which there is a tor-
ped condition of the uterine vessels, unac-
compained by any active congestion. These
are so numerous that, I can only refer to them in
this general way, as my limits will not allow
any thing more at the present. I will howev-
er remark, in the way of closing this part of
my subject, that, if these remedies are judici-
ously employed, and in proper cases, the prac-
titioner will often have the satisfaction
to see the catamnecial flow established by their
administration.

III. Amenorrhoea dependent upon ana-
mia and debility.
Amenorrhoea may be of the character described in our heading of this division of the subject, amenorrhea, or it may as already intimated be the sequel of the variety last described.

Symptoms.—In the cases under consideration, as puberty approaches, the powers of the general system seem to be unequal to the impending struggle; and ill health and debility ensue. Notwithstanding the patient grows rapidly, as is generally the case, she grows more and more emaciated. Her feet and hands are cold; and her face and lips are pallid. There is great lassitude; and fatigue is easily induced. The pulse is slow and feeble; the tongue foul, and the bowels constipated. The appetite is irregular and vitiated, and she will eat chalk, slate pencil, charcoal &c. If the symptoms be of an aggravated character, the skin will present a yellow, greenish hue; hence, the name—green sickness or chlorosis so often applied to this con-
Every part of the system participates in this general torpor: the circulation seems almost to stagnate in its channels; the patient is despondent, and mopes about in solitude; is hysterical and easily excited to tears. If the symptoms continue, the face will become puffy; oedematosus swelling of the feet at night will occur. Not unfrequently, in this advanced condition, dyspnoea and cough will be added to the other symptoms; and the patient's friends may insist that she has consumption. This, on the part of the physician, would be a serious error, as it would, most probably, lead to improper medication.

If this form of amenorrhoea be the result of the one previously described, its change from the one to the other will be gradual; and in the intermediate stages, the practitioner may be at a loss as to which variety it belongs: but, this
embarrassment will not be apt to last for a great while, as anaemia will soon become so decided as not to be mistaken.

Treatment. — In the treatment of this form of anemia, it is not proper to consider the inaction of the menstruating organs as the whole of the disease. This is only a part of a general state of things, and therefore, the effort must at first, be directed to the improvement of the general health. An active purgative, if given in the commencement, will, according to Dr. Loewe, often bring away a large collection of offensive feces, much to the relief of the patient. After this, a small portion of blue pill may occasionally be given. To stimulate the intestines, and the bowels kept open by warm and stimulating purgatives, repeated every morning, combined with some bitter extract. This may be kept up till the tongue begins to clear off, and a healthy appearance
of the alvine discharges is induced.

The stomach, if not now able to bear iron—the sine qua non in the treatment of this affection, must be prepared for it by the use of milder tonics of the vegetable class, along with myrrh, rhubarb or aloes, and ammonia. As soon as the iron can be borne, its administration should be commenced. I think the preparation employed is not a matter of very great moment, so it does not prove offensive to the patient's stomach. The bowels are not to be neglected during its administration; and the astringent preparations are the best for keeping them in a soluble condition, and at the same time arousing the torpidity of the uterine vessels. The diet should, at first, be adapted to the strength of the patient's stomach, and gradually increased in quantity, while it may be made more and more stimulating. The patient at last, must use meats, eggs, &c: and the addition of
a little wine will prove serviceable.

Exercise in the open air, such as riding on horseback, or in carriage, and when it may be done, sea-bathing or cold bathing in the absence of the latter, will be found to be beneficial. Residence during the summer months, at some of the healthy seat springs, especially if they be situated in the mountains, will greatly assist to restore the patient. It is said that moderate dancing, if performed regularly, every day, is a most excellent exercise: and spinning on the old fashioned wheel, perhaps, is not less so. The abdominal and thoracic organs, (if indeed, all the organs do not share to a greater or less extent, in the injurious effects of that most pernicious practice), should be relieved of all restraint thrown upon them by the use of stays and corsets.

We have indicated the course of treat-
must most to be relied upon, but will remark in the closing of this article that, there are certain remedies called emmenagogues, which will often prove serviceable if properly administered. I will only mention a few of them here and refer the reader to the systematic treatises on materia medica, for their various qualities, the modes of administration, and the circumstances indicating their use. Ergot, perhaps deservedly, stands at the head of the list, as its specific action on the womb has been fully established. Besides this, electricity, injections into the vagina of liquor ammoniace and milk, mercury, iron, and iodine deserve to be mentioned; and that is the only notice any limits will allow me to bestow on any of them.