

AN  
INAUGURAL DISSERTATION

ON

*Emanatio Mensium.*

SUBMITTED TO THE

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## Emansio Mensium

By this term we mean an amenorrhoea or obstruction of the menses before they have been established. Some have used it for the retention, which occurs after they have been established, but the former perhaps is the general acceptation of the term. Persons are frequently observed to become alarmed should the young female committed to their care fail to menstruate, after having attained to the age at which the discharge should take place, but we should recollect that while it is common for the change to occur at the age of fifteen, we have no reason to become alarmed should she not menstruate before she has attained to the age of seventeen or even eighteen years, should her health remain in all other respects good. It is only when the failure to menstruate is referable to some

disordered condition of the system, that the individual should be treated as a patient.

The great power of ovulating should always be viewed as the complement of the physical forces of the sex; and it is but reasonable to suppose that instances will occasionally occur of girls, who after attaining to the apparent perfections of all other physical forces are yet unable to rise to the height of this last evidence of generic and genetic power. It may be deemed quite consistent with the facts of the case to believe that where a failure to attain to what is denominated complete puberty, is not obviously connected with some organic lesion of the parts, the failure should be attributed to an hydraemic condition of the girl.

The healthy constitution of the blood according to some writers is expressed by 210, solid and

790 aqueous portions, Now it is obvious that a rapidly growing girl who in approaching the period of puberty, makes excessive demands upon the solid constituents of her blood for the purpose of nutrition and growth, is liable to call for a quantity beyond the power of supply, and so increase the figure for the watery constituents from 790 to 800 or even 820, while the figure for the solid elements, is reduced down to 200, or even as low as 190. It should be remembered that the blood is in reality the solid elements, the production of which cannot be effected except by a power of hæmatisation appertaining to a living solid. Consequently the evolution of it must bear some ratio to the powers of the special solid upon which it depends. Such power may be greater or less at different times, and therefore it is capable of being to a greater

or less extent impaired or completely exhausted. So far as the aqueous portion of the blood is concerned, it should be remembered that it is not formed by the solids, but that it is taken in by absorption, and therefore costs nothing to the constitution. But solid elements, such as albumen, fibrin and the corpuscles of the blood are products of vital operations, and living forces, that may be impeded or exhausted by over tasking.

If we regard six hundred ounces of blood as the mean quantity for an adult in good health, then it will happen that when the solid elements are too rapidly consumed, the whole amount within the vessels shall not be less than six hundred ounces, but the blood shall be weakened by the abstraction of a portion of its essential parts, and by the addition of a sufficient

quantity to the remainder to keep the whole amount in the vessels up to the figure of six hundred, for in the extremest degrees of hydraema, the vessels are supposed to be equally full as in the extremest cases of plethora, and consequently the difference in hydraema and plethora is not a difference in the quantity but a difference in the quality of the circulating fluid.

It seems that the foregoing may serve to show that a growing girl by using too abundantly the solid elements, may thus obtain an excess of the watery portion of the blood, and therefore could not be expected to do more than, carry on her ordinary physiological forces, consequently it is not reasonable to expect her to do this and at the same time attain to the possession of her complement of forces.

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Now if we consider the figure for healthy blood to be 210, for the solid constituents, what will be the effect on its oxygeniferous power by reducing the 210 to 190. Do we not see that as it is not the water of the blood that takes up the oxygen of respired air, then when the figure becomes reduced from 210, to 190, there must be concomitant retraction of its oxygeniferous force and consequent diminution in the evolution of the nervousity, as some writers have denominated it. From the foregoing we conclude that we have a clear understanding of the case, and are prepared to form a correct diagnosis, as ~~to~~ the most frequent cause which prevents the timely occurrence of the menstrua. The hydramic girl must necessarily be weak, not only with regard to her muscular power, but of all

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her physical forces as manifested in the economy, we cannot therefore hope for success in the mere exhibition of emmenagogues, but on the other hand we may reasonably hope for success by wisely directing our treatment to the general condition of the system, and so remove the cause of this unnatural delay of the last evidence of generic power.

There is generally no other treatment required for ~~re~~establishing the menses; than a well regulated diet, proper attention to clothing, a due proportion of exercise, and as a medicinal agent the free use of iron. These are the remedies specially indicated for the treatment of *amenorrhoea* depending upon a watery and impoverished condition of the blood.

The blood of an anaemic girl is incapable of ~~the~~ developing her generative force in sufficient amount for the regular operation of the



ordinary functions, and she will therefore scarcely produce nervous force sufficient to execute both the special and complementary offices of her life, consequently to cure her anaemia is to establish the dominion of her life power over both the special and the complementary power and offices of the system.

No attempt should be made to bring on menstruation in order to cure her anaemia but; on the contrary the anaemia should be cured in order that her blood, fully and thoroughly oxygeniferous, may enable her nervous mass to co-ordinate the biotic force in sum equal to the demands of the general, as well as the special or complementary wants of the economy. The curative measures for such ends consist (as before remarked) in attention to dress, diet, exercise, and the use of baths and frictions. In the administration

of medicines we usually find it necessary to use an aperient of some form or other, and as a general rule we select some of those articles which have a tendency to act upon the lower extremity of the intestinal canal, as aloes combin- ed with other resinous cathartics in various proportions. We sometimes have to resort to mercury for the purpose of correcting the general derangement of the system, as for instance when we entertain an idea that the hepatic secretions are impaired under a vicious state of the port- al circulation. A very proper alternative will be obtained by the exhibition of six grains of Blue mass, ten grains of Soda, and fifteen grains of the extract of Turassacum suspended with a drachm of Gum arabic in an ounce of distilled mint or cinnamon water, such a dose should be followed by an aperient dose of Senna or salts. As regards Torries we know of nothing

so well adapted to the treatment of anaemical girls as the various preparations of iron which seems to possess a peculiar power to modify the rate of the haematosis.

Whether the iron enters into direct combination with the blood, to render it more powerfull and more noble by its union with it or whether it acts as a direct tonic for the solids of the economy imparting a greater energy to the cell life of the blood corpuscles, I am not capable of determining nor is it vitally important that it should be settled.

The preparations of iron which have been recommended for the treatment of this disease are almost innumerable, and consequently we will only refer to one or two of those preparations, having special reference to that form of the medicine in which we have the greatest abundance of confidence. In the administration

of iron we should be governed by the peculiar circumstances of each individual case, should there be in connexion with a watery condition of the blood, a diseased condition of some other organ or set of organs, then it will be proper to combine with the iron such remedies as will have a special action upon the organ or organs so diseased, but should there be no existing complication in the case, we would recommend the administration of the medicine uncombined with any other therapeutical agent. Perhaps we have no preparation of iron better adapted to the treatment of *inans-*  
*is mensium* <sup>than</sup> the impalpable powder described by Dr. Miigs, which is prepared by passing a current of hydrogen over peroxide of iron heated to redness in a porcelain tube, thus giving us the metal pure and uncombined in a state of impalpable powder. The dose of this powder

is two grains, given immediately after each daily meal. If taken while the stomach is in the act of digestion it does not occasion any unpleasant sensations and it is present and in readiness for any acid that should happen to result during the chymification of the food. We will next advert to some other circumstances that may prevent the young female from menstruating after having attained to the age at which the menstrua should be established. It sometimes happens that organs become blighted, during the embryonal or foetal life, and never grow nor develop themselves after the birth of the child. Should such a blight of an ovary a womb or vagina occur it would be very likely to escape notice until the period of puberty, and then disclose the remarkable truth by a state of amenorrhoea. Dr Briggs, mentions the case of two ladies both of whom were married and

neither of whom had ever menstruated, nor could there be any discoverable traces of a womb found in either one yet each of them was in all other respects a highly sexual creature, being fully provided with all other sexual attributes and appearances. Again the regular flow of the menses may be prevented by the annihilation of a part or the whole of the womb as a consequence of inflammation that has filled the cavities with a plastic exudation resulting in a fusion of the walls into one common substance. Such women cannot menstruate save where the atresia affects only the canal of the cervix and when that is the case the womb may pour out the blood of the menses which is retained in the distended cavity. The uterus and ovaries may be healthy while the vagina may be closed by want of development in the embryonal stage, and as in the case above alluded

to, the menses are regularly poured into the womb and vagina, and retained until relieved by accident or by the intervention of the surgeon. There are other cases in which some considerable disorder of another and important organ or part serves to concentrate upon itself the powers of the living economy which they divert from a general to a particular use or determination. Among these are those affections which have a tendency to set up a kind of local irritation in the system, such as chronic rheumatism and long continued inflammations of the articulations, all of which have a tendency to divert the physical forces of the young female from that of performing her ordinary physiological acts. As regards the treatment of this disease, consequent, upon what we have denominated a local condition of

the system, we have nothing of peculiar interest to say, farther than the speedy removal of the cause of such conditions by the use of appropriate means. In the treatment of this, as well as all other diseases, we should endeavour to avoid the quackish principle of resorting to one remedy for the treatment of every case, without having first ascertained the true pathological conditions of our patients. There is perhaps no other disease better calculated to perplex and embarrass the young physician, than the one under consideration. Hence we perceive at once, the great importance, of being careful in making out our diagnosis, that we may not commit errors which, would disgrace ourselves and, the honorable profession to which we belong. As practitioners of medicine, we should learn to see



and to think for ourselves, and not to be governed entirely by the notions of those who may have had opportunities superior to those of our own, I do not mean to say, that we should pursue our vocation regardless of the teachings of others, but that we should justly appreciate the experience and observations of all honorable members of the medical profession. Taking this as our guide we hope, not only to be useful to the generation in which we live, but we may perhaps be able to reflect light on some important points connected with the science of medicine, and so confer a favor upon succeeding generations, which would not only redound to our own honors, but that of the age in which we live.