AN INAUGURAL DISSERTATION
ON
Emansio mensium.

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Ectopic Menstrum

By this term we mean an ammenorhea 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 acceptance 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
disorder 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 force of the size; 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 genetric 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 2:10, 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 haematosis 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 part, and by the addition of a sufficient
quantity to the remainder to keep the whole amount in the vessels up to the figure of size hundred, for in the extremest degree of hydraemia, the vessels are supposed to be equally full as in the extremest cases of platitude, and consequently the difference in hydraemia and platitude 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.
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 reduction of its oxygeniferous force and consequent diminution in the evolution of the bitterness, 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 hydrodynamic girl must necessarily be weak, not only with regard to her muscular power, but of all
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 establishing the menstrua; 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 insanus menstruum depending upon a watery and impoverished condition of the blood. The blood of an anomalous girl is incapable of developing her innervative 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 complemental offices of her life, consequently to cure her anaemia is to establish the dominion of her life power over both the special and the complemental 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 oxygenised, may enable her nervous mass to activate the biotic force in sum equal to the demands of the general, as well as the special or complemental 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 also combined with other resinsous catharticks in various proportions. We sometimes have to resort to merely for the purpose of correcting the general derangement of the system, as for instance when we maintain an idea that the hepatic secretions are impaired under a vicious state of the portal circulation. A very proper alternative will be obtained by the exhibition of six grains of Bluemass, ten grains of Soda, and fifteen grains of the extract of Sarsaparilla suspended with a drachm of Gum arabic in an ounce of distilled spirit or cinnamon water, such a dose should be followed by an aperient dose of Senna on salt. As regards stones we know of nothing
so well adapted to the treatment of anaemic girls as the curious preparations of iron which seem to possess a peculiar power to modify the rate of the haematuria. Whether the iron enters into direct combination with the blood, to render it more powerful 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 these 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 such individual case, should there be in connection 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 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 therapeutic agent. Perhaps we have no preparation of iron better adapted to the treatment of anaemia than the impalpable powder described by Dr. Muig, which is prepared by passing a current of hydrogen over peroxide of iron heated to redness in a porcelain tube, thus giving as the metal fine and uncombined in a state of impalpable powder. The use 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 chemical action 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 obdurate, during the embryonal or fœtal life, and never grow nor develop themselves after the birth of the child. Should such a blight of an every account or imagine 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 menstruum. Dr. Boeings, mentions the case of two ladies both of whom were married and
Mother 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 menstrua 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 hysterical irritation in the system, such as chronic pneumatism and long continued inflammations of the articulations, all of which have a tendency to divest 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 denominate a hysterical constitution of
the system, not have nothing of peculiar interest to say, further 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 principal of resorting to one recipe for the treatment of every case, without having first ascertained the true pathological conditions of our patient. This 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 avocation regardless of the teachings of others, but that we should greatly 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 honor, but that of the age in which we live.