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Obstetrics: The Science and the Art - Part II. The Physiology of Reproduction; Chapter VI. Menstruation

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PART II.

THE PHYSIOLOGY OF REPRODUCTION.

CHAPTER VI.

MENSTRUATION.

Women are subject to a discharge of blood from the genitalia, which returns very regularly once a month. This monthly periodicity of the bleeding has given it, among various people and languages, the name of menses, menstrua, menstruation, catamenia, mois, monatliche, menstruação, méese, &c. Among us, it is called courses, periods, terms, monthlies, monthly sickness, unwell, times, and a variety of other names, hints, and allusions, that need not be here summed up.

The discharge is not met with in children, unmarriageable girls, or old women. It appertains to women only as long as they are capable of conceiving. They cease to be child-bearers when they lose the power of menstruation.

In this country the menstrual office usually commences in the fifteenth year of a young person's age, and continues to recur at intervals of twenty-eight days during about thirty years, these returns being prevented from taking place only by pregnancy and its consequences, or by some disorder with which the woman may be attacked. The menstrual flowing commonly continues during three or five consecutive days, and the whole quantity of blood lost at each catamenial period is variously estimated to amount to from four to six ounces. As soon as the flowing or courses have ceased, the woman appears to be in all respects well until the time again approaches for her to be seized with the same kind of hemorrhage.

It is to be expected of every growing girl that she shall have her first change or show about the end of the fifteenth year, although it is very common to observe the first appearance of it at the end of the
fourteenth year of her age. Indeed, it cannot be esteemed an un-
common circumstance for girls to have their first change as early as
the thirteenth year of their age. It does not, however, invariably
happen for the first menstruation to take place so early as the fifteenth,
and not a few young women are advanced to the end of the sixteenth,
or even far into their seventeenth year before they have their first
sign. The precocity or lateness of the first eruption is connected with
circumstances so various that it is often very difficult to say why one
young person should begin far too early, or another postpone to an
inordinately late season the performance of an office having so intimate
a connection with woman's whole nature.

The menstrua do not in all cases obey the rule that ordains their
return once during each lunation, and many women go to the full ex-
tent of the calendar month, or even beyond it, while many others
come far short of the lunar revolution, being regular every three
weeks, or oftener.

Hence, it appears that though the catamenia are governed by a
principle of periodicity, that periodicity is not invariable for the whole
sex, and the Student should, therefore, be ready, in any case submitted
for his judgment, to decide whether the periodicity as to such special
case is or is not normal. My experience as a practitioner has afforded
very numerous opportunities to observe erroneous interpretations of
this matter, and to confirm my long settled convictions, that every
woman, though under this general law of lunar month periodicity, is
in fact ruled by a cyclical law of her own individual nature.

In deciding concerning alleged cases of menstrual irregularity, one
should not lose sight of the fact, that every sanguineous discharge
from the genitalia of unmarried or non-pregnant women is not of neces-
sity to be held as a menstrual evacuation; because it may, and often
does happen for women to bleed from the womb or vagina irrespective
of their catamenial nature. Yet it is so natural for one accustomed to
the periodical flow, to suppose every such flowing somehow dependent
on the menstrual office, that we need not wonder to find so many mis-
interpretations. For example, a woman affected with polypus uteri, is
very likely to have some bloody show during consecutive months, or
even years, and yet when she consults with the physician on the sub-
ject, she is almost sure to speak of the issue as her courses, and say
that she has had her courses without interruption for so many weeks,
months, or years. An educated physician, however, who knows that
menstrual discharges are nothing more than the signs of the monthly
ovulations, ought to make no such mistake in diagnosis, nor do I pre-
sume to think he would do so except from carelessness.
If the mean duration of each menstrual act is from three to five, or at most seven days, then all the instances in which women complain to us of courses lasting for two or three weeks, or more, should be considered due to some other cause than the ovulations, and treated accordingly.

Women, as has been already shown, develop and discharge a ripe ovule from the Graafian follicle once in every twenty-eight days; but there ought to be no surprise on finding now and then a person in whom the ovulative power is so vigorous as to repeat the oviposit every fourteenth day, or every twenty-first day, and I conclude that all those persons who complain to us of menstruating twice a month, or once every three weeks, do actually mature and discharge their ova every fourteenth or every twenty-first day. Such examples as the above, though to be placed among the instances of menstrual irregularity, are not necessarily to be regarded as cases of bad health, but rather as the proofs of uncommon power of reproduction in the individual. They do not in general require any medical treatment, because they contain within themselves a power of cure, and it will be found that their continuance is not greatly prolonged; since if the too frequent returns result in some degree of weakness, the redoubling of the ovulations ceases with the loss of power; such, at least, are my views of the circumstance, and such are the results that I have many times witnessed. I hope, therefore, the Student will carefully discriminate between sanguineous genital discharges caused by ovulation, and such as arise from polypus, inflammations, cancers, and other disorders that women are liable to.

Ever since the revelation made in 1825 by Purkinje of the existence of the germinal vesicle, which led to the plenary discovery and publication of the physiology of menstruation, the old superstitions on the subject have been decaying and fading out of sight. At the present day, it is almost universally admitted that the last days of the maturing or ripening process of ovarian ovules are attended with a positive affluxion of sanguine humors—not to the laboring ovary alone, but to the entire system of the reproductive organs. In this sanguine molimen the womb largely participates, and becomes the seat of a considerable capillary engorgement. In most women this engorged condition of the bloodvessels of the womb is betrayed by that sense of fulness, weight, and even aching, of which they generally complain. To know the anatomical structure of the womb, particularly its tubular glandules and the extremely delicate vascular network that exists there, is enough to convince any one that a considerable engorgement of those vessels would be likely to exhibit itself not only in the
weight, tension, and pain above mentioned, but in actual extravasation of blood from those delicate vessels. It is hardly too much to say, that the tenuity of those coats is so great as scarcely to exceed the thickness and strength of a soap-bubble, so that they easily yield to the vascular engorgement, and bursting, allow the monthly-engorged womb to discharge its surplusage of circulation in the form of women's courses or menses. Such, at least, is the best interpretation of the circumstances that can be at present given, and as it is one that satisfies all the demands and conditions of the case, I have long ago accepted it, and do now believe I shall never change it for another.

In this view, then, I am to teach the Student that the menstrual fluid of women is blood, and that their courses consist in a monthly repeated uterine hemorrhage, and nothing more nor less. The Student, I am well aware, is urged by many able writers and teachers to consider the discharge in question as a secretion, and not as hemorrhage; but it appears to me that no advocate of the doctrine of secreted menstrua will now deny that those discharges do contain a large proportion of true blood, nor that they do coagulate like blood drawn from a vein. I leave it to the Student, therefore, to settle with his own judgment the question, how can blood-disks be subjects of secretory action? Can solids be secreted? Could not a woman as well secrete a watch or a diamond ring as one single blood-disk? Nothing can be secreted that is not fluid. A blood-disk is a solid, and not a fluid. The menstrual discharge is a hemorrhage, and it is the sign that the woman is affected with her monthly ovarian engorgement that has extended to the vessels of the womb: menstruation, therefore, strictly interpreted, is ovulation, and the sanguineous discharge that is vulgarly considered as the principal point, is far less principal than the ovarian ovulation, of which, indeed, it is only the outward mark or symptom. To fail in giving discharge to the monthly outflowing blood, is thus far less important as relates to the woman's health than to fail in the ovulation. The latter failure is evidence of serious embarrassment of the vital forces; whereas failure of the former is due to some want of sympathy between the womb and its ovaries. There are constantly to be met with women, especially school girls, who ovulate with perfect regularity, but who do not give out the sign thereof in a bloody evacuation from the womb; and I may venture confidently to assert that such amenorrhoeas are of little import, and demand nothing beyond some judicious hygienic directions.

Inasmuch as I have thus confidently stated the opinion that the menses consist of extravasated or hemorrhagic blood, it seems proper here to compare the analysis that has been made of these fluids, I
mean blood and menstrual fluid. It is universally known that healthy human blood consists of water 790, fibrin 3, blood-globules 127, and albumen 80, which equal in sum one thousand parts. The analysis of menstrual fluid made by Denis, and stated at p. 172, of M. de Boismont's *Treatise on Menstruation*, gave of water 825, while the other constituents, as globules, albumen, extractive matter, fatty matter, salts, and mucous substance, amounted to 175; so that while the solid constituents of healthy blood are 210, those of the menses are only 175. Rindskopf's analysis (Simon's *Chem. of Man*, 337) gave 820.830 of water for one trial, and 822.892 for a second trial; while Simon's analysis yielded 785.000 of water, only 5 less than that of healthy blood. In like manner an analysis by Dr. Letheby (*Lancet*, May 2, 1845) gave of water 857.4; so that, taking into consideration the circumstance that the menstrual fluid is destined to pass through the canal of the neck of the womb and through the whole length of the vagina, in which it sometimes lingers on its way, we may understand why the blood of the menstrual hemorrhage should contain somewhat more water than blood taken direct from a vein, since it could not but become more or less mixed up with the moisture of the genital passages. Perhaps these statistical statements are, after all, superfluous for those Students who agree with me that a blood-corpuscle, being a solid, cannot possibly be a thing secreted, but one that can escape from its containing bloodvessel only by an act of hemorrhage.

As to our professional measures for ascertaining in our cases whether the patient has too much or too little of the menstrual discharge, it seems proper to put the Student in mind, that as women, while menstruating, usually apply a napkin in the form of a T bandage as a receiver, we can judge pretty correctly concerning the amount by learning how many receivers are necessary from the beginning to the ending of each menstruation. I believe it will be safe, as a general rule, to allow an ounce of blood to each separate receiver, so that if only six be required we may assume that the patient loses about six ounces; but if twelve or eighteen changes are considered necessary, then we may conclude that she does lose some twelve or eighteen ounces of blood monthly.

Though the above quantity seems to be very great, yet I doubt not that thousands of women do part with such a great amount at each catamenial return; and the strangest part of the case is the indifference with which the constitution tolerates so great a periodical waste. I even think it by no means a very uncommon thing to find women who never employ fewer than twenty receivers for each season of
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return, and it is to be observed that they generally lose a great deal of blood besides what is absorbed by the napkins.

So great are the differences in the menstruation of different women, that while many of them part with eight, ten, or fifteen ounces without the least inconvenience, but become indisposed if they lose only two or four ounces, there are thousands of healthy women who are so sparing of their blood that they take no precautions against exposure—never making use of any other receiver than their chemise—and guarding their modesty against some possible blood-stain by putting on an extra thick petticoat. It is evident that this sort of women must bleed very little indeed, or the flowing would immediately run down to the shoes, or come as a broad stain through the outer garment. Yet these sparing women would, perhaps, be very ill if they should lose as much as those other copiously menstruating ladies, who would also esteem themselves to be sick if not flowing freely. How true, then, is it to say that every woman, in her courses, has a law unto herself, and how important for the Student to know and acknowledge that truth, as a guide in his practice.

In examining the subject of menstruation, the question must somewhere arise as to what is the precise relation of time betwixt the rupture of the Graafian cell and the commencement of the flow. Does the woman begin to bleed before or after the escape of the ovulum from the ovarium? This is a problem that remains to be settled by future observers. In the mean time, I consider it true to say that when a woman's body is examined by the Anatomist, he can always find the opened and emptied Graafian cell, provided the individual should have died while discharging the menstrual blood, or within some few days after its cessation; I have examined a considerable number of such subjects, and never failed to detect the open hila through which the little egg had passed outwards. The vestige is usually a bloody or reddish point. If a probe be pressed upon it, it passes downwards into the empty cell which contained the egg, and generally fills after its escape with some coagulated blood. The wood-cut that I subjoin (Fig. 47) represents the appearances in the womb and ovaries of a young girl who died here on the eleventh day after the eruption of her courses. As she perished with an acute disease, it may be that the healing or reparative processes in the opened vesicle may have been less rapid than is usual. On receiving the specimen, I perceived the open hila from which the egg had escaped, and inserted a probe deep into the deserted cavity of the vesicle. Upon cleaning the margin of the hila, it was plain that the opening had been made by the absorbents and not by any violent
rupturing force. The whole of the circumjacent tissue of the ovary was highly injected, and red with full capillaries and small branches,

![Diagram of menstrual cycle](image)

as is commonly found to be the case. I next divided the empty Graafian vesicle by splitting the ovary with a bistoury, carrying the incision down through the middle of the open pore to the bottom of the cyst, which contained the usual clot of blood. The letter A in the figure is at the fundus uteri; the os is seen in the open vagina. At B is the left ovary; c is the trace of an incision made there through a scar left after a preceding ovulation; E is the right ovarium, and F points to the empty crimped cavity of the recently evacuated Graafian cell.

The internal surface of the cell was raised up into convolutions like those on the surface of a brain, an appearance always to be observed, and which depends on the filling up of the space between the outer coating and the inner coating of the ovicapsule. This insertion or impaction of substance betwixt the two coverings causes the inner coat to be crimped, folded, or convoluted as above mentioned, a process which probably tends to press the escaping egg towards the opening hila from whence it is at last, by this mechanism, quite expelled.

The late Dr. Joshua Wallace presented to me a few years since the womb and ovaries of a young woman who died suddenly while menstruating. The cavity of the womb contained a portion of the menstrual fluid. In that specimen I found the bloody pore or hila in the Graafian cell, which as usual contained a clot of blood. I need describe no others of the numerous specimens of the same kind that I have had in my hands; it suffices to say that no woman who dies while in the act of menstruating, fails to exhibit such vestigia to the dissector who seeks for them. Nevertheless, no one yet knows at what mo-
ment the hila is prepared, and we have only to consider it probable that the uterine engorgement is coincident with that of the ovaries, and that, as soon as the ovicapsule becomes empty, the lessening of the ovaric tension allows the ovarian molimen to begin to lessen. It is, under all circumstances, most probable that the egg escapes very nearly at the time that the womb begins to bleed, and that the uterus continues to pour out its blood until its vascular congestion and nervous erethism are dissipated by the hemorrhagic discharge.

Writers of a late period have persisted in believing that the discharge of the ovum is due only to an act of impregnation or fecundation; but the modern Student of medicine knows that the germ could not be fecundated while locked up within the recesses of the ovisac, itself buried beneath the indusium and tunica albuginea of an ovarium. On the contrary, he knows that ovulation being a spontaneous act of ovipositing, fecundation of the egg can take effect only after it has been set at large by the act of the absorbents. Therefore, he also knows that a woman can be subject to fecundation only within some unknown but short season succeeding her menstruation. M. Pouchet, of Rouen, whose learned researches have thrown a flood of light on this before obscure department of physiology, seems to feel quite sure that the period after a menstruation during which the discharged ovule remains subject to fecundation, does not extend beyond the twelfth day, and I cannot gainsay that decision of the celebrated naturalist and physician. I am, however, sure that it does extend to the eighth day, and probably beyond it, because Jewish women among my patients, and very prolific ones too, have assured me that they never did violate what they regard as a religious duty, that commands them to avoid the approach of their husbands until eight complete days have elapsed after the entire cessation of the mensual flux. They have assured me that in a very large Jewish sect this law is scrupulously fulfilled, and if so, we have in this religious custom a positive proof that the escaped egg remains apt for fecundation during the eight Jewish days of abstention. Why may it not also be true that M. Pouchet's law of twelve days is as correctly ascertained? There is surely no reason to suppose that the discharged ovule must necessarily perish or decay sooner than the twelfth day after its separation, since it may lie perdu within the fimbria or in the canal of the Fallopian oviduct, ready at any time to meet the conflict with the male zoosperm, which is fecundation.

However probable or even true it may be that a woman is unlikely to be fecundated later than the 12th day, it is by no means sure that she can safely indulge illicit passions under such an hypothesis,
because, while it is absolutely true that ovipositing is a periodical phenomenon repeated every twenty-eighth day, and accompanied with menstrual hemorrhage, it does not necessarily follow that a ripened germ may not, now and then, be cast off irregularly by a vigorous ovarium, without occasioning any hemorrhagic molimen and flowing. A woman, therefore, who believing that the period within which fecundation is possible has fairly gone by, and who consequently indulges in the sexual approach, may be caught and brought thereby to an open and palpable shame. I have been informed by more than one married woman, that her abstention, practising on the above principle, was of none effect.

The former doctrines of menstruation give us no clear indications of a therapeutical treatment of the disorders so frequently connected with that periodical act. It was foolishness to assign as a cause of the menstrual periodicity an influence of the moon, since observation and experience showed to all inquirers that there is no coincidence of the act with any particular phase of the moon, some women being always to be found just beginning, just concluding, or midway between the periods of monthly evacuation.

The doctrine of a general plethora, peculiar to the sex, and required of them as a means to the end of reproductiveness, was easily refuted by the always obvious facts of persons menstruating regularly even when very much reduced by sickness or other causes of oligemia.

The true doctrine was that of a local plethora, or, in other words, a state of periodical hyperæmia of the reproductive organs; and now that doctrine is not only established, but it is made plain to the understanding, for the periodical paroxysm of stromatic force, that hurriedly concludes the ripening of the most perfect ova, establishes the affluxion that fills the capillaries of the reproductive organs, and engorges them, or renders them hyperæmic to the point of causing the monthly hemorrhage by which the hyperæmia is removed, leaving behind it no trace of indisposition.

This admirable exposition, for which we are so greatly indebted to its discoverers, preserves us from the most serious errors in our practice; while it reveals to us a vast deal of information as to the state and wants of women in whom the catamenia have become disordered, or in whom they have never appeared.

Heretofore, physicians have looked to the bloody sign alone as the act; hereafter, they will be likely to look upon the maturation and discharge of the ovarian ovule as the physiological act of menstruation,
MENSTRUATION.

and upon the sanguineous effusion only as the sign that the physiological act has been or is being performed.

True menstruation is the regular periodical evolution and expulsion of an ovule; it is ovulation. This act may suffice to cause the woman to bleed mensually, or it may prove insufficient to that end. It is, for the most part, a matter of indifference whether it does or does not cause the mensual hemorrhage; the essential thing is to mature and deposit the ovule. There are many circumstances of the menstruating girl or woman that are able to prevent her from bleeding, notwithstanding she may enjoy all the other faculties of perfect health.

As to the woman—a married woman who conceives in the womb does not necessarily upon that account cease to mature and deposit her germs. On the contrary, she retains a strong tendency to menstruate up to an advanced period of gestation. Yet she does not, as a very general rule, discharge the mensual fluid. But there are many examples of women who do actually retain, in the early months of pregnancy, the power to pour out from the vessels of the womb the usual product of menstruation; an act that must lead them to abortion.

Probably a woman has a much greater liability to abort at the time of her mensual crises than at any other time; which can only depend upon the occurrence of the catamenial effort under the periodical exacerbation of the germiferous force.

The same is true of the woman who gives suck.

A woman with a nursling at the breast does not, in general, menstruate until the child is seven months old; and thousands of women do not menstruate until they have weaned the child. Yet these women are liable to become pregnant; indeed, there are many who do become pregnant again and again before they have weaned their children, and before they have had the return. I say there are many such persons, so many, indeed, that the case is quite a familiar one to the accoucheur. A lady told me, on the 14th December, 1849, that she was pregnant again, and that she had not seen since the birth of the child which was born before the infant she was, at the above date, nursing, and which she must now wean before the due time of weaning. Such facts are proofs of the continuance of the germ-production in the ovary, as well as of the ovulation.

As to the young girl—a young female who has been brought up at home in the country, is rarely sent to a boarding-school to finish her education without soon finding herself the subject of a catamenial derangement. She may have been perfectly regular at home; but, soon after she takes her place upon the school-form and daily devotes many
hours to study, the menses are apt to be suspended, and to remain suspended until she leaves the school, and ceases to consume her nerve-force in those mental or intellectual operations, that require for their effectuation all the biotic force she is capable of evolving. The consumption of this force leaves her destitute both of the power and the necessity to discharge the menstrual blood; not depriving her, however, of the force required to fulfil the true physiological office, the ripening, to wit, and the discharging of her monthly ovulum from the stroma. Her ovulation goes on regularly, and she is well, though not apparently menstruous. I have found many young women thus affected; but, the health being in all other regards perfect, I have not ventured to interfere beyond the interference of recommending a lessened devotion to mental labor, a more abundant and exciting diet, and a proper amount of daily exercise in the free air. Such amenorrhoeas cease as soon as the girl leaves school. Similar observations are to be met with in the writings of medical authors.

The pregnant and the suckling woman do not menstruate, because the life-force is fully occupied otherwise, yet they fulfil the germiferous law. In the same way, the studious and sedentary school-girl does not menstruate visibly, because her nervous mass is already preoccupied. She performs, meanwhile, the physiological act of the ovi-ponte or ovulation, yet she does not bleed.

Let the woman miscarry, or wean, and she will soon perceive the visible sanguine sign of her ovi-ponte. Let the overtasked school-girl cease to call upon her nervous mass for impossible supplies of biotic force, and her menses will speedily return, and be regular in time and in sum; for her nervous energy is no longer misdirected, and improperly consumed in studies beyond its power of supply.

It is time to say a few words upon the catamenia, as connected with a computation of the commencement of pregnancy.

I presume that a woman cannot be fecundated except it be coincidently with the ovi-posit. As a rule, then, a woman is liable to become pregnant only at, and about the periods of her monthly sickness; and, in computing the commencement of pregnancy, we shall commit the fewest errors if we begin the count at the day following that on which the flow ceased. Two hundred and eighty days should be allowed as the usual duration of a gestation.

One who is regular ought to see every twenty-eighth day. If she sees for three days only, then she ought to be twenty-five days without seeing.

In what portion of these twenty-five days is it that she is liable to impregnation? Dr. Pouchet insists that the liability extends to twelve
days after the drying up of the discharge, and not beyond that time; and it seems probable that the ovule should retain its vitality without fecundation, so long as twelve days after its escape from the follicular pore.

If those Jewish women spoke truly, they gave incontrovertible evidence that the fallen ovule retains its fitness for impregnation, not only during the eight days subsequent to the drying up of the courses, but perhaps longer, since we know not precisely at what period of the mensual act the ovule departs from the cell. In the case already mentioned, of the young girl whose womb and ovaria were given to me by Dr. J. Wallace, the patient died while menstruating, and the uterus still contained a certain quantity of the menses; yet here the crypt was open, and the ovule had already escaped. It might, therefore, be fecundated as soon as the menses should disappear, but not before that disappearance.

In July, 1848, a young girl destroyed herself by taking arsenic, just before the expected return of the menses. Dr. Wistar, of this city, who examined the body, informs me that in one of the ovaries was a blood-red spot, the size of a lentil. There was no absolute rupture of the crypt as yet, nor any blood in the uterine cavity.

I repeat that we do not, as yet, know at what period of the mensual act the vesicle bursts. The above example proved to me that the rupture took place in the young girl, previous to the drying up of the discharge; so that, in the case of the Jewish women, if the same rule holds, we perceive that the ovule may be discharged, and yet retain its vitality without fecundation for eight days, and even more than eight days. But we do not know where it rests in such a case, from the period of its escape from the ovarian ovule, until it becomes fecundated eight days later.

After the foregoing, I am clearly not called upon to say at what precise period after the courses, a woman cannot possibly conceive. I have no doubt there is such a period. Time, and opportunity to observe, can alone settle this point. The celebrated case of the birth of Louis XIV., and the advice of the court physician, Fernel, relative thereto, ought not to be cited, since they have none of the characteristics of rigorous truth. It shows, however, the old date of opinions on this point. I am for the present very willing to believe, with M. Pouchet, that a woman shall not conceive later than the twelfth day, as a general law, though it may be that, occasionally, the fecundation may occur even later.

There are questions connected with this topic that ought not to be
lost sight of by the diligent Student, who desires to prepare himself upon all the points of a professional duty. For example—

Some women are to be met with who never menstruate, and who yet preserve a most perfect physical and mental health.

Among these exceptional creatures are to be found those in whom the ovaria or the uterus has never been developed. Dr. Renauldin, on the 28th of Feb., 1826, reported to the Royal Academy of Medicine the case of a woman who died at the age of fifty-two years. She had never had any appearance of menstruation. The breasts were not developed. She had only a cervix uteri, which was of the size of a writing-quill—there was no womb proper—and the ovaries were scarcely developed.

Such a woman could not menstruate because of the double failure of uterus and ovary. There could be no sexual passion; indeed, such a creature was scarcely sexual.

When Percival Pott, the illustrious surgeon, removed the ovaria of his patient under an operation for hernia, he took away with them the power of menstruation. There are numerous examples of females who did never menstruate, owing to the absence of the ovaries. When our domestic animals are subjected to the operation of spaying, they are totally deprived of the power of ovulation; and with its loss the sexual sense disappears as well as the sexual attraction also; or if any remains are discernible, they are very imperfect.

As to the cases of absence of the womb, they are less rare than the former, and ought not to be lost sight of by the inquirer, lest he permit his ignorance to lead people into a grievous unhappiness. A woman ought not to be married who has never menstruated, until it shall have been clearly ascertained that she is not amenorrhoeal from faulty development.

I have seen several pretty women who were suffered to marry before it was ascertained that they had no wombs.

All attempts that were made, in either of these cases, to bring on menstruation, are well fitted to cast ridicule upon the physicians. A physician should never be otherwise than cautious in all his dealings with cases of absent or suspended menstruation. I state the following instance, in order to show the evil effects of a want of medical cautiousness.

Mrs. Blank, aged twenty-two and a half years, was married to her present husband more than two years ago. She is of a middling stature and fair complexion, and presents all the exterior appearances of a person in perfect health.

She is not fat, but has a certain embonpoint, a good figure, and a
very feminine and most agreeable expression of countenance. She is, indeed, a handsome woman.

She has never menstruated, nor has she suffered from catamenial pain, or severe attack of any disease. Seeing that she did not menstruate at the proper period, medical advice was sought and followed in the treatment of the case. The treatment was unsuccessful, and she was married with the expectation of her friends that the union would be followed by an eruption of the catamenia. The mammae were, at the period of the marriage, well developed, and the pudenda was amply supplied with hair; indeed, all the phenomena of a perfect development of the sexual system were present except those connected with the menstrual office.

The husband found, however, that some unknown cause acted as an impediment to the congress, and after more than two years of concealment, he consulted me on the subject.

An opportunity being allowed to me for a full investigation in presence of the mother, I found the external organs perfectly formed, the mons large, the labia and the nymphæ, as well as the clitoris, perfect, and the os magnum of a natural appearance; but the vagina was a mere cul-de-sac, not more than two inches, and probably less than that, in length. Upon pressing the point of the finger strongly against the bottom of the cul-de-sac, it seemed to have no connection with any vaginal part above it.

I requested the lady to lie on her back; and, introducing the index finger of the right hand as far as possible into the rectum, I explored with it the excavation of the pelvis, in order to discover any tumor or organ that might be contained within the cavity; but, as all the tissues were ductile and very yielding, I began to suspect that there might be no womb at all in the case. Therefore, laying the fingers of the left hand upon the lowest part of the hypogaster, and pressing them firmly towards the finger that was used in exploring the internal parts, I found that they could be brought so near to each other as to make it perfectly clear that there was no womb in the case; otherwise, I must have felt it, so near was the approximation of the fingers of the right to those of the left hand.

Having, by the most careful exploration in this manner, discovered the unfortunate state of the young lady, I felt obliged, in a conscientious discharge of duty, to tell her the whole truth, which I did in the best way I could; and yet, as may be readily supposed, the knowledge of her situation was accompanied with all the manifestations of that violent distress and agitation which might naturally flow from such unhappy circumstances.
The aphrodisiac sense in this lady is very strong, which might well be the case where the ovaria are fully developed, even though the uterus had never been evolved in her constitution.

I was deeply impressed myself with the melancholy fate of two estimable persons, who would never have placed themselves in so unhappy a condition if, by a proper exploration of the parts before marriage, the real state of the case could have been discovered. The case also seems to show how improper it is to permit the rites of marriage to be solemnized for persons who do not possess all the attributes properly belonging to the sexes. I do not contend that every case of failure to menstruate at the proper season is indicative of the necessity for exploration by the touch; but I think no case of extraordinary protraction of an emansio mensium, and especially where any question of contract of marriage is likely to arise, should be allowed to go on without the acquirement, by a medical adviser, of true and perfect knowledge of the facts as to the organization of the parts.

In the early part of the year 1848, I met with another example of similar want of development in a comely young person, who had been married some three months before. A shallow vaginal cul-de-sac at the bottom of well-developed external genitalia, mammary glands of full size, warm aphrodisiac temperament, and abundant hair, showed that all the sexual physical attributes were present, save only as to the absence of the uterus, no trace of which could be detected by Dr. Pancoast, Professor of Anatomy, by Dr. Jewell, of Philadelphia, or by my own careful exploration. No doubts were left upon our minds of the complete failure of uterine development.

CASE.—December 24, 1852, I visited Mrs. ———, S——n St., aged 22, of a delicate form and stature, but healthy and vigorous. She had been married eighteen months, and had never yet menstruated, nor suffered from any catamenial disorder.

The external genitalia are fully developed, and covered with hair, though less abundantly than is seen in many women. The mammae are well formed, and of rather full size; the nipples large, with very dark areas. The hypogastric region soft and yielding to the touch, as in the healthiest women. Pressing the integuments down to the plane of the strait, no tumor or unnatural resistance is found. The vagina is a thin, membranous cul-de-sac, an inch and a half in depth. I could not discover any central stylus of indurated tissue, as would have been discovered had there been atresia from cohesion of the vaginal walls, whence I infer that the cul-de-sac stops at the bottom of the
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cavity, which never has been any deeper than now. The sexual desire is strong, and attempts of coitus frequent.

I pressed the left index finger as far as I could reach into the rectum, and also a female silver catheter five inches into the bladder. Carrying the point of the catheter backwards until I could touch it with the finger in the rectum, I could ascertain whether she had a womb or no; she had no womb.

I saw a similar case of absence of the womb here on the 3d of January, 1833.

The persons interested in this unfortunate situation, though less sensitive than those mentioned above, were rendered unhappy by so grave a misalliance; probably the last consequences of it may be greatly to be deplored. How important, then, is it that medical attendants, the only persons who can be competent, should be always cautious and watchful as to these points of duty.

Not only on account of the risk of fatal mistakes of the kind above mentioned should we be ever attentive to the duty of making accurate diagnosis, but there are a great many other shoals and quicksands in the track of the young practitioner, who fills his sails with the prosperous and flattering winds of his earliest successes.

He would find himself under obedience to a good rule who should firmly resolve never to pronounce any opinion as to the catamenial disorder until he has taken measures to form a solid and inexpugnable judgment on the cases submitted to his decision.

The consultations relative to this class of diseases are very numerous for medical men engaged in business. Well, let it be a rule to suspect of pregnancy every married woman who complains of amenorrhœa. This, though so obviously proper, is a rule often lost sight of by the medical practitioner, whence it happens that we encounter now and then the ridiculous circumstance of reiterated and vain attempts made by medical men to bring on menstruation in married women, who prove in the end to be pregnant. I have met with many such instances.

Let every married woman who does not menstruate be, therefore, treated as if reasons exist for supposing her to be gravid. If, by the lapse of time, or by the occurrence of circumstances, a solid conviction can be attained that the patient is not gravid, she may be sufficiently early subjected to treatment conformable to her wants.

In like manner, in young unmarried women failing to menstruate, yet exhibiting no other evidence of disordered health, there is always time enough to consider what may be requisite in the treatment. The more especially, if we may believe, which I consider undeniable, that
such a woman, healthy, vigorous, and in all respects enjoying the complacency that can only exist in those that be well, either does really perform her physiological act of menstruation—to wit, in the regular deposit of her germiferous ova, yet without manifesting it by the sign, I mean the mensual hemorrhage; or else, that pregnancy prevents the exercise of menstruation.

It will, perhaps, appear to be almost a rudeness to make this assertion, and I should not venture to make it in this place, but under a sense of the duty I owe the young Student, which calls upon me to put him early upon his guard. I have so often been nearly deceived in instances of this kind, that I am convinced that nothing but a constant cautiousness has saved me from making the grossest mistakes. Many have been the occasions of my being consulted for catamenial obstruction, with a design to entrap me into the administration of drugs that might remove the difficulty by procuring abortion; but, like all those who will resolve to adopt the rule which I suggested above, I have hitherto escaped so distressing an error of commission. Should a female, presenting all the appearances of brilliant health, complain of such obstruction, I should be sure to come to one of the conclusions indicated in the paragraph—viz: either the ovarian stroma is active and regular in the performance of its physiological act of ovulation without the sign, or else that a gravid state prevents the sign of the act from becoming manifest.