ON THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF THE FUNCTIONAL DISEASES OF THE UTERUS.

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WHEN I decided to draw the attention of the members of this Society to the Functional Diseases of the Uterus, I soon became convinced that only a fraction of the questions which this subject naturally gives rise to could be considered, during the short space of time which is allotted to the reading of a paper; and hence arose a fresh difficulty, viz., the selection of the points most worthy of consideration. After some thought, I have come to the conclusion, that the most practical method of treating the subject will be to take a case which has occurred in practice, to detail the history, symptoms, and treatment, and then to consider what conclusions can be drawn from the facts thus brought forward.

CASE. The case is that of a young lady, E. W., aged 26, spinster, who came under my care on October 29, 1850, when she gave the following history of herself.

The catamenia appeared at about sixteen years of age, and were accompanied with much pain at the lower part of the stomach and across the forehead; previous to this time she had "nothing the matter". The catamenia were now absent for twelve months, during which period the health was very delicate. She described herself as looking "very bad", being thin, very languid, and generally obliged to lie down every afternoon; as having a cough, no appetite, pain in the left hypochondrium, and much aching pain in the lumbar region and inside of the thighs. These last symptoms returned every fortnight or three weeks, and continued a day or two; she then "used to be pretty well", but the headache remained every day, more or less. For some months she was under the care of a surgeon, but experienced no relief from the medicines, which, she thinks, were various preparations of steel. Three months after the medicines were discontinued, the catamenia appeared for the second time, and were accompanied with great pain for two or three days. They were of a dark colour, continued nearly a week, and were not followed by any white discharge.

From this time the health was totally changed; she became stout, had much colour, and the spirits were very good. The catamenia appeared every month, within a day or two, accompanied with some headache and slight pain in the lumbar region and inside of the thighs. They were generally of a dark colour, and remained about five days; the quantity was not great, and they were usually followed by a white discharge for one week afterwards. The accompanying pains came on a few hours before the menstrual discharge, and remained for a day or two, gradually becoming less.

For four years she continued in this state of health, running about and dancing a great deal, whether the catamenia were present or not.
She was now attacked with what was termed "bilious fever", which was so severe, that her friends had no hopes of her recovery. It came on with flushes in the face, and great pain in the head; afterwards she was very thirsty, and drank much cold water; she was also very sick, vomiting large quantities of sour fluid, about half a pint three or four times a day, when, after a good deal of straining, a little yellow matter would come up. Great pain was also present in the back, the lower part of the stomach, and all over the thighs, but chiefly in the front and inside. These situations were also very sore if anything touched them, and had the feeling of being bruised or beaten. For three weeks she was unable to leave her bed; and during great part of this time she was delirious. When partly recovered, she left home for change of air, and gradually got about again—that is to say, she got much better. The appetite was very good (she always, indeed, felt hungry, with a sinking and craving at the epigastrium); she gained some flesh, but was never so stout as before; and she always felt wearied and languid, being soon worn out by any slight exertion, and was more subject to headache than before. The catamenia continued regular in recurrence; the accompanying pain about the same; the quantity diminished; the colour became lighter; and the white discharge increased in quantity and in duration.

During more than three years she remained in this, as she considered, delicate state of health, when, eighteen months ago, she was again confined to her bed for three weeks. This illness began, during the cataminal period, by the face being much swollen, and of a dark purplish red; and was attended with cold shiverings, and much fever. As in the former illness, she again had great pain in the lumbar region, at the lower part of the stomach, round the hips, and all down the inside of the thighs. The bowels were not moved for a fortnight, although she took a great quantity of castor oil. She felt very sick, but did not retch much. The medical attendant described the attack as "partly erysipelas", and ordered warm fomentations for the pain in the stomach, which gave some relief. She stated to me that the medicines "did not do any good", but that she gradually got about again, when she felt very weak, the spirits being extremely low. The stomach was so tender that she could not stand upright, but was obliged to walk double; her friends jocularly remarking that "she looked like an old woman after her confinement". It was now told her, that her illness was caused by not taking sufficient exercise; and she was ordered to get out of doors, and to keep the bowels open, for which she had some pills which gripped very much. Her health was worse than it had previously been. At one time, however, it so much improved, that she thought it was going to be completely restored, when all the old symptoms returned, and she was just as she had been. After suffering in this way for nearly eighteen months she came to London, and presented the following symptoms.

She was rather tall and thin, with dark hair, dark eyes, swarthy complexion, and medium conformation. The expression was dull, heavy, and depressed; the lips of good colour; but the upper lip was much swollen, and of a dusky red. She felt very weak, faint, and inclined to be hysterical; had lost much flesh lately, particularly in the bosom, and about the upper part of the chest. On the day before I
saw her, she could only sit up for one hour and a half. The least exertion caused fatigue, when drops of cold perspiration would stand on the face, a singing noise be induced in the head, and attended by a great sensation of palpitation; she also had frequent feelings of faintness and sinking during the day. A dull pain was complained of across the forehead, attended with a feeling of tightness, and occasionally a hot heavy pain at the top of the head, at which time the face "feels so hot". The head very often, but not always, felt full, and frequently was much confused. The spirits were very low; she was easily excited, and started much at any noise. She felt rather nervous and irritable, which she tried to overcome; and sometimes she had the feeling as if something dreadful were going to happen to her, which was relieved "if she could cry". The memory was very bad, and much indecision had come on, which was not the natural character. Sometimes she slept pretty well, but had very bad dreams; sometimes she "could not sleep at all". When she did sleep, she frequently awoke with a start, frightened and perspiring. The eyes felt heavy and aching; the eyesight was dull and impaired. The skin was soft and cool, with some moisture. She always felt chilly, though the face and hands were subject to frequent hot flushes; nor could she bear either heat or cold. The pulse was 108, regular, rather small, and soft; no venous murmurs were heard. The tongue was rather large, pitted at the edges, which, as well as the under surface, were of a red colour; the centre being covered with a dirty white fur. She had a very unpleasant bitter and sour taste in the mouth, much thirst, and no appetite. She had not taken meat for the last month. Sometimes a sinking at the chest was felt, as if she wanted something, yet could not eat. There was no pain nor distension after taking food; but the stomach sometimes swelled very much, chiefly in the evening, before going to bed. The bowels were at the time confined; sometimes they were regular. The urine was pale, and in considerable quantity; at other times it was darker, less in quantity, thick, and deposited a red sediment on standing. Much complaint was made of a constant pain in the lumbar region, shooting up as high as the middle of the dorsal region. From the lumbar region it extended round the hips, and was most severe in the iliac regions, extending from thence to the hypogastrium, the groins, and the anterior part and inside of the thighs, which latter parts were very sore. The pain did not extend below the knees. From the upper lumbar region, pain also extended round the upper part of the abdomen, below the epigastrium. "A distinct pain" also existed in the sacral region, and extended round the glutei muscles, and down the outside of the thighs, as far as the knees. The pain in the sacral region produced a feeling as if the back was broken, or as if she "wanted something to bind it up". For two days lately she had been lame in one leg, and could not walk across the room; she described this as not having power over the leg to stand, and feeling that the inability came from, or was connected with, the sacral pain. It came suddenly, and went away suddenly, in the night during sleep. She was always obliged to be very careful on sitting down, as this hurt her, giving the feeling of sitting upon some tender body. When the bowels were moved, great pain was felt, as if the motion passed over a tender substance deep in the pelvis, whilst a distinct pain was
felt at the anus. The pains extended up the back, and round the lower part of the stomach, and were not always equally severe. The catamenia were irregular in recurrence (six or seven weeks, and sometimes three months), and were accompanied by a great aggravation of all the pains described; they continued not more than two days, were very pale, and were followed by a great quantity of yellow discharge, which was constantly present.

On local examination, the vagina was found narrowed by the strong contraction of the muscles of the perineum. It was hot, tender, swollen, and velvety to the feel; whilst the arteries, along its walls, were felt to pulsate strong and full. Passing the finger up to the uterus, this organ was found to be low, and somewhat behind the perineal muscles. It was very tender to pressure, hot, and swollen, having a somewhat soft and distended feel. The lips were smooth, with a well marked velvety surface, the orifice nearly natural, the neck enlarged, and surrounded by mucous membrane lying in circular folds; whilst the pulsation of the arteries was strong and quick. As no impediment was offered, by the existence of a marked hymen, to the introduction of a small speculum, this instrument was passed up to the uterus, when the lips were found somewhat enlarged, perfectly smooth, of a dusky brick red, and without a trace of abrasion or of ulceration. The mucous membrane of the vagina was of a similar, but deeper, dusky brick red colour. Some purulent matter entered the instrument.

Six leeches were applied to the anterior part of the uterus, and directions were left to encourage the bleeding to about half a pint. A saline diaphoretic mixture was directed to be taken three times a day, the warm hip-bath to be used for a quarter of an hour each night, and perfect rest to be maintained.

Nov. 1. The leech-bites had bled freely, and caused a faint weak feeling, but the pains were very much relieved, and more benefit had been experienced than from any means yet employed. Pulse 100, regular, and soft. The head felt rather light, but clearer. She was less nervous, and felt better. She was desired to continue the remedies.

Nov. 8. She continued improving; the vagina was much less tender, not so hot, and the arteries beat with less force and quickness. The surface was lubricated with a fluid, which was oily-like to the finger. The uterus was less tender and swollen, and the arteries beat with diminished force. In walking from the bed to the fire she staggered, yet expressed herself as being much better. The leeches were again applied; a pill, containing two grains each of blue pill and extract of henbane, was ordered to be taken each night, and a lotion of decoction of poppies and acetate of lead to be used twice a day.

Nov. 15. Reported herself as much better in every respect. The pains were all lessened; the discharge, though still yellow, was not so great. She slept better, though still annoyed by very unpleasant dreams; the appetite was much the same, the general strength much improved, so that she could now walk about with considerable ease.

Nov. 26. She had had an increase of the pain, in consequence of exerting herself more than usual, in order to assist in nursing her sister's children, who had been attacked with typhoid fever. The local tenderness and swelling of the vagina continued to diminish, as did also the force in the pulsation of the arteries. The uterus was still
rather tender, slightly enlarged, and rather firm to the feel; but the pulsation of the arteries was only perceptible on the left side, where they beat quickly, but were small in volume. Pressure upon this part increased the pain in the left iliac region, and in the stomach and lumbar region. The leeches were again applied, and rest enjoined; and she was directed to continue the other remedies.

Dec. 3. The catamenia appeared yesterday, the accompanying pain being nothing to what it had been. They were high coloured, and yet not inclined to black: the quantity not great. In every other respect, she was very much improved. The leeches were repeated the day after the cessation of the catamenia, and the other remedies were continued.

Jan. 3. The catamenia appeared two days ago, with so little inconvenience, that it might be said she had no pain; she considered herself quite well, and was most anxious to return to the country. She had gained flesh, slept soundly and well; the spirits and appetite were good; the bowels rather confined, the memory much improved, the head clear. At her earnest solicitation, she was allowed to return home, with strict injunctions to continue the warm hip baths, once or twice a week for a time; to rest a little each afternoon, and to take a saline bitter tonic twice a day.

Feb. 28. I received a communication from her, in which she said that she considered her health perfectly restored, and had gradually ceased to use the bath and the medicine.

Remarks. On glancing over the previous history of this case, it is evident that, at the age of sixteen, the patient having been previously in good health, an unusual degree of congestion of the uterus accompanied the commencement of the menstrual function. After the disappearance of the catamenia, the accompanying congestion remained, as was shown by the languor, want of appetite, pain at the hypochondrium, and the aching pain in the lumbar region, and inside of the thighs; and this affected the general health. A surgeon, misled, we may suppose, by that delusive system of considering a symptom of a disease as the disease itself, considered the disorder to be amenorrhoea attended with debility, and administered steel remedies, in order to procure the regular recurrence of the catamenia. This was not successful; nor is it likely that it should be, for, although iron is eminently efficient in removing that state of the blood upon which anemia and chlorosis depends, it is most injurious when administered during congestion or chronic inflammation of the uterus, acting as it does, as a direct stimulant of the uterine organs, and hence perpetuating these morbid states. Did it in this case produce such an effect? Although I am not in a position to give a decided answer to this question, yet the probability is that it did; and that, when the actions of nature were no longer interfered with, they, to a certain extent, recovered their healthy condition. Three months after the remedies were discontinued, the catamenia appeared for the second time; though the uterus was still labouring under an undue congestion; as evinced by the great pain which accompanied menstruation, and by the dark colour of the discharge; and there was now also congestion of the vagina, as shown by the white mucous discharge.

From this period the health greatly improved, and for four years continued good; yet the original congestion of the uterine organs re-
mained, as is proved by the pains which attended menstruation, the dark colour of the blood, and the subsequent white discharge. She was now attacked with what was called "bilious fever", but which was, really, inflammation of the uterus. The symptoms which prove this were: great pain in the lumbar region, at the lower part of the stomach, and the front and inside of the thighs, delirium, great pain in the head, and sickness, attended with much straining, and vomiting of large quantities of sour fluid. How far this attack was to be attributed to the imprudent course of running about and dancing, which she was permitted to follow, I will not stop to inquire, but will only say that probably this was the cause. From this attack she partially recovered, with the uterine congestion more marked than before, and the general health in a shattered condition.

For three subsequent years the health remained in this state, when she suffered from another attack of inflammation of the uterus, of less severity than the former. This is shown by the cold shivering and the fever; the pains in the lumbar region, lower part of the stomach, and inside of the thighs; and the constipation of the bowels. No relief appears to have been obtained from the remedies employed; but she again got about, bearing the evident marks of serious uterine disturbance—great general weakness, depression of spirits, and inability to stand upright in consequence of the tenderness of the stomach, and the general appearance, which caused the jocular remark of her friends, "that she looked like an old woman after her confinement".

**Symptoms.** The symptoms, of uterine disease, such as were presented by my patient when she came under observation, may for convenience be divided into groups—direct, constitutional, and local.

In the group of direct symptoms, or those which arose directly from the disease itself, we may place, the pains in various parts of the body, the condition of the menstrual function, and the vaginal discharge.

The pains which were present in this case, were pains in the lumbar region, shooting up to the lower dorsal, and extending round the hips, across the sides of the abdomen, towards and into the hypogastric region, the groins, the anterior and inside of the thighs; also extending from the upper lumbar region round the upper part of the abdomen. At the same time, to use the patient's own words, "a distinct pain", giving the feeling as if the back "wanted something to bind it up", existed in the sacral region, extending round the glutei muscles, and down the outside of the thighs as far as the knees. Can any answer be given to the question—Why are the pains found in these situations? Will the anatomy of the nervous system of the uterus afford any clue to the explanation?

It has been pointed out that the portion of the nervous system, called the sympathetic, consists in reality of an admixture of the true sympathetic—the gelatinous fibre,—and of branches of spinal nerves—the tubular fibre;—and that by this means the various viscera have distributed to them branches from the cerebro-spinal system. It has also been shewn that, in addition to the nerves coming from the lumbar plexus, and distributed to the muscles and skin of the lumbar region, the muscles and skin of the abdomen, and the muscles and skin of the anterior and inner part of the thighs, nerves, likewise de-
rived from this plexus, are distributed to the lower portion of the uterus, through the medium of the hypogastric plexus. The organ is thus placed in direct relation with the nerves coming from the lumbar plexus, by means of the branches of spinal nerves, which are derived from the same plexus, and distributed to this organ. Now, bearing these facts in mind, and remembering that alterations of sensation may be reflected through the spinal cord, in the same manner as motor actions, we have a beautiful and scientific explanation why, in this case, in which the uterus is affected, the pains are felt in the parts supplied by the nerves derived from the lumbar plexus,—to wit, in the lumbar region, the sides of the abdomen, and the thighs. This, however, explains but a portion of the pains which were present. Another distinct class were seated in the sacral region, and extending from thence to the posterior part of the thighs. How are these to be accounted for? If we again turn to the anatomy, we find that the nerves which supply the vagina are not derived from the lumbar plexus, but come from the sacral plexus, which likewise supplies the skin and muscles of the sacral region, of the hips, of the perineum, and of the posterior part of the thighs. Again, bearing these facts in mind, and remembering that sensory impressions derived from the vagina are reflected along the nerves derived from the same plexus as furnishes the vaginal nerves, we have an equally satisfactory explanation why, in the inflammation of the vagina, here present, the pains should be seated in the situations in which they were found.

As the consideration of these hitherto inexplicable pains is of great importance, as a means by which uterine affections may be distinguished from other diseases, and also as a means of diagnosing, whether the uterine affection be seated in the vagina, or in the uterus, or in both organs combined, or in the ovary, I may be allowed to make a short digression from the strict consideration of the case before us. It has been stated, that when the vagina is affected, the pains are reflected along the course of the nerves derived from the sacral plexus, and that when the lower part of the uterus is the seat of the disease, the pains are felt in the parts supplied by nerves from the lumbar plexus; both which statements are illustrated by the present case. But suppose the body of the uterus be the seat of the disease, where then are we to look for the pains which will be induced? Let us again turn to the anatomy, and see what that teaches. It informs us that the spinal nerves, which are distributed to the upper part of the uterus, are supplied by the intercostal nerves, branches from which pass inwards over the thoracic sympathetic, and join together to form the splanchnic nerves; and that the fibres which compose the splanchnic nerves traverse the semilunar ganglia, and contribute to the formation of the superior aortic plexus, from which the upper part of the uterus is supplied by nerves. From these data, we would expect, when the body of the uterus is the seat of disease, that the reflected pains would be found along the course of the intercostal nerves. And such is the fact. Did time permit, I could submit different clinical observations in support of this a priori conclusion; wherein most severe and obstinate pains, traversing the course of the intercostal nerves, and chiefly seated over one or both hypochondria, were found to depend upon inflammation of the fundus uteri, and
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were immediately relieved by the application of a few leeches to the upper part of the neck of the uterus, that being the nearest available point to the seat of the disease.

It must not be supposed, that in every case the pains will be reflected along all the nerves which are in relation with the organ which is affected. In severe cases, such is the fact; but in less marked cases, one or two only of the nerves may be affected, or the pain may be chiefly confined to the terminal branches of distribution, producing an ill defined pain over a particular region of the body. Yet at all times, the principles which have been stated will materially facilitate the just appreciation, if they do not afford the means of an absolute diagnosis, of a large proportion of pains which are well known to accompany uterine disease, but of which no explanation has yet been given.

To return now to the present subject. Although the menstrual function and the vaginal discharge are in many cases, as in this, important signs of the condition of the uterine organs, yet nothing, it appears to me, has tended more to retard the scientific advance of uterine pathology than retaining, even to the present day, the artificial division of uterine affections, founded on the alterations of these functions. This is the more to be regretted, as the menstrual function is in no wise an indication of the nature of the disease which exists. In this case it was established at sixteen, and subsequently suppressed for twelve months, then to be re-established with regularity. And although the health was said, at this time, to be very good, yet, had attention been paid to the accompanying pain, the dark colour of the flow, and the subsequent white vaginal discharge, it would have been evident that a degree of congestion remained, which required but some want of attention to fan it into an attack of inflammation—a state of things which actually occurred. After this attack, the menstrual function, though regular in recurrence, still indicated that the original congestion remained;—but it indicated more: for it gave evidence, by the lighter colour of the flow, that the general health was suffering. At a later period, the great aggravation of the accompanying pain, and the continuous yellow discharge, were indices of inflammatory action in the uterus and vagina; whilst the irregularity of the recurrence of the catamenia, the diminished period of their flow, and the very pale colour they assumed, too clearly indicated the great influence which the continued suffering had produced upon the general health. It is worthy of remark, that the mucous and purulent discharges which accompany these cases are formed by the vagina, and do not in any way indicate the condition of the uterus, which may be seriously affected without any vaginal implication, and hence without any accompanying discharge.

The constitutional symptoms indicate that the digestive system, the nervous system, and the general health are affected; but they likewise show a great immunity of the respiratory and circulating systems. The disorder of the digestive system is marked by the oedematos and furred tongue, the disagreeable taste in the mouth, the want of appetite, the sinking at the epigastrum, the distension of the stomach in the evening, and the alternating condition of the bowels and urine. But these conditions do not indicate so marked a derangement of this system, as appears necessary to produce the disorder of the nervous
system and general health which is likewise present, and hence cannot be considered as the cause of the illness, but must be looked upon as one of the consequences of some other cause, which produces in like manner the disturbance in the other systems. An attempt has been made to connect the alternating conditions of the urinary secretion with a mal-assimilation of the food, and hence to use this secretion as a sign of the treatment required. In this, however, I cannot agree. The regular action of the kidneys is apparently disturbed by the same cause which disturbs or disorders the other organs of digestion. This is shown by the state of the urine varying in the same ratio as the original disease varies. When the pains in other parts of the body become intensified, indicating an aggravation of the uterine disorder, whether this be caused by the congestion which accompanies the catamenia, or from an increase in the disease, the urine becomes deeper coloured, scanty, thick from the deposit of lithates, and requires to be voided more frequently than before. But when the opposite state prevails, and the uterine affection is improved, the urine then becomes abundant, clear, and pale. These alternations are frequently observed during the course of these affections, and take place when the same course of diet has been continued throughout the variations. There can be little doubt that an improper diet, taken while the digestion is already impaired, will increase this disorder; but still this is not the original cause of the disturbance in the urinary functions.

The disorders of the nervous system are by far the most apparent. The various reflex pains which have been already considered, and which continually harass the patient, belong to this class of symptoms. In addition, we have pain across the forehead, and at the top of the head, with fulness, and occasional confusion of ideas; also loss of memory, depression of spirits, increased excitability and irritability of the nervous system, restless nights, harassed by frightful dreams, and impaired eyesight. Another condition of the nervous system, which is only indicated in this case, is one of great interest, and one which I hope to take up at some future opportunity. I allude to the fact of the sudden loss of power over one leg, and the sudden regaining of this power whilst asleep. I have met with some well marked cases of this description, where the patient had been treated for diseased spine, in consequence of the peculiar pain present in the sacral region. In some, a complete paraplegia existed in regard to the motor power, whilst the sensation was not perceptibly altered from that of health; in others, an incomplete hemiplegia existed. In all, the paralysis passed away as the uterine disease, which apparently produced it, was gradually cured, and the health regained its tone.

The evidence of the impairment of the general health is found in the loss of flesh—particularly marked about the chest, and especially at the bosom—and the increased frequency of the pulse. In this case we may also add the general weakness and languor, together with inability for exertion, which, when attempted, was followed by cold perspiration, singing in the ears, and beating of the heart. It does not, however, appear that we can in all cases attribute these latter symptoms to derangement of the general health; for they occur too early in the course of the disease for this explanation to be admitted; and further, the marked manner in which they are often connected
with the appearance of the catamenia, shows that the condition of the uterus, acting on the nervous system, is sufficient to produce them.

In casting a retrospect over the constitutional symptoms present in this case, we find that the nervous system was especially affected, and that this was attended by disorder of the digestive system. How is this to be accounted for? Will the anatomy and physiology, of which so much use has been made, assist in this explanation? I think it will. In addition to the anatomy of the nervous system affording a beautiful explanation of the various pains which accompany uterine disease, it further teaches, that the viscera of the abdomen are supplied by spinal nerves from the same nerves or plexuses which furnish branches to the uterus, i.e., the dorsal and the lumbar nerves. These nerves send branches inwards, which become mingled with the gelatinous fibres of the sympathetic, and are distributed in company with them to the various viscera. With these anatomical facts before us, and with the knowledge that pains are reflected along the nerves supplied from the lumbar and intercostal nerves to the back, to the walls of the chest and abdomen, and to the thighs, we have a fair reason to infer that similar pains will be reflected along the branches furnished from these same nerves and distributed to the viscera.

This inference acquires additional confirmation from the "working" frequently felt in the bowels, and the tenderness of them which is present, independent of the tenderness in the abdominal walls. If this reasoning be correct, we are enabled to give a satisfactory explanation why the abdominal viscera should be disordered, which clinical experience has taught us is the fact. But is this derangement in the condition of the nerves sufficient to account for the derangement in the functions observed? I submit that it is, and that it affords a sufficient reason why the respiratory and circulating systems should be so little implicated. The nerves, which supply these systems, arise from the spinal cord higher up than the origin of the uterine nerves, and hence are not implicated in the series of reflex actions to which these diseases give rise. It is right, however, to call to remembrance that, in the case under review, the pulse was accelerated, and the heart beat strongly on exertion. These symptoms, however, appear to depend on the state of the general health; for it is well known that, as a rule, the pulse is not increased in frequency, nor is there palpitation of the heart, except when some constitutional state is present at the same time.

The local symptoms have been already detailed, and do not require further examination. They afford indisputable evidence of the existence of inflammation of the vagina and of the uterus.

From a short review of the pathology to which the examination of this case has led, we have the following propositions:—

1. The symptoms by which uterine disease is recognised are chiefly referable to derangements in the nervous system; which consist of
   (a) Pains reflected from the uterus to various parts of the body.
   (b) Irritation of the spinal cord, and its prolongation into the brain, communicated to the various organs through the spinal nerves distributed to the uterus.

2. The reflex pains, which have so much puzzled the physiologist
and the pathologist, are beautifully explained by attention to the anatomy of this portion of the nervous system.

3. Next to the nervous system, the organs seated in the abdomen are those which are chiefly implicated in the derangement.

4. The derangement of these abdominal organs may be explained by the irritation of the uterine nerves being reflected through the spinal cord, along the spinal nerves distributed to these organs, which nerves arise from the same part of the spinal cord as the uterine nerves.

5. The respiratory and circulating systems do not suffer from uterine disease, until this disease has existed a sufficient length of time to derange the general nervous system, or the general health.

6. The immunity of these systems may be explained from the fact, that the nerves, which are distributed to them, arise from the spinal cord, or its prolongations, higher up than the uterine nerves, and are, hence, not implicated in the reflex phenomena which exist.

7. The general health finally becomes implicated by the want of appetite, the deranged digestion, the want of sleep, the little which is gained being disturbed by frightful dreams; and by the constant state of irritation and pain which the patient habitually suffers, and which is greatly increased for several days, at each catamenial period.

8. And, as a corollary to these propositions, I may add that, when we remember that the organ under consideration is destined to have a periodic afflux of blood to it, to take on greatly increased arterial action, and to undergo wonderful enlargement as a physiological condition, all apparently designed by nature to occur without implicating the general health of the female;—we have a reasonable explanation why the diseases of this organ should affect the general system so little as they do.

**Diagnosis.** It is necessary to consider the diagnosis apart from the local symptoms, as it is important to establish it, before submitting the patient to a local examination.

From Anæmia. The symptoms which favour the idea of this disease being present are, the general weakness, the languor, and inability to exertion; the latter being followed by perspirations, singing in the ears, and beating of the heart; also the lowness of spirits, the nervous excitability, and the irregularity and pale colour of the catamenia. But the symptoms which contraindicate it are sufficiently well marked; they are the complexion, the red colour of the lips and mucous membrane of the mouth, the character of the pulse, and the absence of venous murmurs, or arterial whiffs: whilst the nervous irritability which is present, the pain in the head, the sleepless nights and frightful dreams, the pains in the back, abdomen, and thighs, the great pain attending the catamenia, and the yellow vaginal discharge, all too clearly point to the uterus as the organ chiefly implicated. I am aware that, in this appreciation of the symptoms, I may differ from some of our most esteemed authors; yet I feel assured that, in the description usually given of anæmia, authors have included symptoms which properly belong to functional diseases of the uterus, in consequence of these two affections being, not unfrequently, met with combined in the same individual. The state of health which is produced by the functional diseases of the uterus, is, however, very distinct from that of anæmia, though frequently confounded with it.
From *Rheumatism*, the diagnosis presents some difficulties. The aspect of the patient, the state of the digestion, the condition of the urine, which is high coloured, and depositing lithates, and the seat of the pains, might mislead. For we must remember, that the pains which accompany uterine diseases are seated in the nerves which supply the muscles of the back, abdomen, and lower extremities, and consequently might readily be mistaken for pains seated in the muscles themselves, especially as they are aggravated by the action of these muscles. But the exact seat of the pains, the course which they pursue, their aggravation during a catamenial period, the varying condition of the uterus, the disturbed state of the nervous system, and the general condition of the patient, aided by the previous history, will suffice for a correct diagnosis. Some authors consider that some functional diseases of the uterus essentially depend upon a rheumatic condition of the system, present at the time; and certainly the relief which is sometimes obtained by rheumatic remedies favours this view; but how far this may be accidental, and not essential, I am not prepared to say.

From *Disorders of the Digestive System*, this case offers little doubt in the diagnosis. The digestion was certainly disordered, but the disorder bore no relation to the general derangement which was present. In some cases which are attended by obstinate constipation of the bowels, with frequent sickness, and great pain in the forehead, as a sequence of this constipation, the diagnosis becomes difficult, especially from the reflected pains from the digestive organs being seated in much the same situation as the reflected pains from the uterus. The reason for this is obvious, on reflecting that the spinal nerves distributed to these organs are derived from the same part of the spinal cord. However, a careful consideration of the history and symptoms will suffice to form a diagnosis.

From *Disease of the Kidneys* there could be little hesitation in forming the diagnosis. The only disease with which the uterine affection was likely to be confounded, was pyelitis; but as this disease is generally confined to one kidney at one time, and as the pain in this case existed equally in both lumbar regions, the chances were greatly against the existence of this affection. However, I have known a similar affection of the uterus mistaken for a pyelitic attack. The circumstances which led to this error were, pain over the region of the kidneys, chiefly confined to one side, and increased on pressure; pain shooting down the side of the abdomen, simulating the course of the ureter; pain in the inside of the thigh; the urine being acid, containing pus-globules, and occasionally being impregnated with blood-discs and albumen. But on a careful examination of the symptoms, these errors were readily detected. The pain was not exactly over the seat of the kidney; it was more superficial, being evidently reached before the pressure could have affected this organ; it was likewise not present on pressing the kidney from the abdomen. The pain in the course of the ureter was also seated in the walls of the abdomen; the mixture of pus-globules with the urine was detected to arise from the purulent vaginal discharge, whilst the occasional presence of blood and albumen was derived from the same source during the presence of the catamenia. By attention to these points, the diagnosis was soon established.
It is far from unfrequent for the pains present in uterine affections to lead to the belief of the existence of *Ovaritis*, in consequence of pain over the seat of the ovary, which is increased under pressure, and attended with the occasional drawing up of the muscles of the abdomen, so as to simulate a swelling. However, attention to the course of this pain will show that it comes from the lumbar region downwards and forwards to this part; that, upon moving the skin over the muscles beneath, the pain is recognised to be seated in these muscles, and hence is increased by pressure before this can have affected the organs deep in the pelvis. Nay, further, it often happens, that upon gentle pressure great pain is felt, but on increasing this pressure and carrying it deep into the pelvis, little or no pain is complained of. The pain is occasioned by the pressure on the abdominal walls, and its severity, like that of most nervous pains, passes off from a continuance of the pressure. It is, however, very distinctive of the ovary not being the seat of the disease.

What is the diagnosis between this disease and "inflammation and ulceration of the neck of the uterus in the virgin female"? On referring to the symptoms of ulceration, as detailed by Dr. Henry Bennet, we recognise, in the description which he gives, the same symptoms which existed in the present case. He states that these symptoms indicate ulceration; yet, in the case under consideration, no ulceration was present. Here then is a marked discrepancy. This case, in itself, is sufficient to shew that the symptoms, which are given as indicative of ulceration, do not indicate this morbid lesion, inasmuch as they here existed in a marked degree, and yet not a trace of ulceration was to be found. Too much, however, has been written on this subject to allow it to be discussed in this incidental manner. It would occupy more time than can at present be devoted to it; yet I may state, that there is not sufficient evidence before the profession to prove the existence of this morbid condition in the virgin female, and that the statements, which have been made respecting it, contain serious fallacies and errors.

**Treatment.** The eminent success which attended the treatment adopted in this case, is the best proof that it was the correct plan. It also satisfactorily proves, that chronic inflammation of the uterus and vagina will produce great languor and depression of the general system, loss of flesh, pain and fulness of the head, great disturbance of the nervous system, and disorder of the digestive organs; and that all these symptoms will pass away when the local cause which produces them is removed. For, under the influence of mild antiphlogistic remedies, directed to overcome the local disease, all these morbid signs passed away, and the patient gained flesh, lost the languor and depression, recovered her natural spirits, the power of sleeping soundly, and the appetite; in a word, was restored to better health than she had had for years. It would, however, be conveying a very erroneous impression, were it supposed that all cases yield thus readily to treatment. In many, the original disease has continued a sufficient length of time to impress a functional change on the nervous system; and this change will remain after the local disease, which produced it, has been removed. These are troublesome cases, and
require gentle narcotics with general tonics, and attention to the mental condition of the female. At other times, chronic inflammation is combined with an anæmic condition of the system, which constitutes a distressing combination. For, on the one hand, depressing remedies are required to subdue the local disease, and yet are contraindicated by the condition of the general system; whilst, on the other hand, the chalybeates, requisite to restore the condition of the blood, perpetuate and aggravate the local inflammation.

In the case under consideration, the application of leeches to the uterus itself was resorted to immediately. This was done in consequence of the long continuance of the disease, the severity of the pains, indicating a considerable degree of inflammation, and the general aspect of the patient, which conveyed the impression that local remedies were required in addition to the constitutional treatment. However, in the majority of cases with which I meet in practice, the local application of remedies is not required, as the disease yields, in a short time, to mild narcotics, combined with small doses of blue pill, or grey powder, at bed-time; giving, during the day, alkalies, with hydrocyanic acid, in a bitter infusion; these remedies being aided by rest, and the occasional warm hip-bath before going to bed. In a large number of cases it is even unnecessary to recommend the use of lotions, which are particularly objectionable to the virgin female. The application of a few leeches to the perineum, after the appearance of the catamenia, followed by a warm hip bath, is a very efficient means of combating the local determination of blood in chronic inflammation of the uterus and vagina, combined with congestion of the veins of the pelvis; a condition of things not unfrequently met with.

The plan of treatment which consists in giving stimulating remedies to "bring on", as the phrase is, the catamenia, whilst narcotics are administered to relieve the pain which this treatment induces, is much to be reprobated, as being the means of perpetuating the disease. It is very true that, in many cases, similar remedies, aided or not by a change of air, will restore the debilitated constitution, and, by removing some of the effects of the disease, lead to the delusive hope that the disease itself is cured. But, unfortunately, after a little time the good effect of this treatment passes away, and the patient returns to the condition in which she was previous to this plan being adopted. It is, obviously, beginning at the wrong end. Another plan of treatment, which consists in considering the reddened mucous membrane of the lips of the uterus as an ulceration, and attempting to cure this by applying nitrate of silver, is so erroneous, and founded on so many false premises, that it is impossible to enter upon the discussion of it at this late period; I only notice it to record my dissent from the erroneous pathology which it includes, and from the improper practice which it inculcates.

94, Langham Place, March 1851.