

ON VAGINISMUS (DYSPAREUNIA OF DR.
BARNES).

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GENTLEMEN,—At the present meeting I should like to direct your attention to a very interesting disease of the female genital organs, viz., vaginismus. It has, doubtless, a claim upon our consideration, for up to the present day there exists a great variety of opinions concerning it, and moreover it has already been stated by Dr. Sims that no other disease has so fatal an influence on the matrimonial state, for it can change love into aversion.

Before I proceed to the cases met with in my own practice I will give you a brief account of the different views respecting this subject.

Dr. Sims has generally been considered as the first who discovered and described this disease. I think this is not quite correct, for a year previously (1860) Dr. Simpson read a paper in the Edinburgh Society, entitled "Vagino-dynia, or a Painful Vascular and Fascial Contraction of the

Vaginal Canal," from which we see that Dr. Simpson had had the opportunity to study two different forms of this disease.

The chief symptom of the first form was a transverse or longitudinal string of different sizes and tenseness and very painful to the touch, an inch above the vaginal aperture. This excessive sensibility was considered by Dr. Sims as the pathognomonic sign. The second variety consisted in the tenderness of spasm of the whole vagina or of the musc. sphinct. vaginæ only. The result in both cases was difficulty or impossibility of sexual intercourse. Simpson explained the existence of the string as the result of a spasmodic contraction of the anterior edge of the musc. levat. ani, or of the processes of the pelvic fascia, caused by their subacute inflammation.

The other variety he ascribed to the spasmodic contraction of the musc. sphinct. vaginæ, resulting from a hyperæsthesia vulval or vaginal, or from an irritating eruption, erosions or some other pathological condition of the mucous lining.

For both forms of the disease Simpson adopted the following method of treatment: if the case was persistent, he used tenotomy; if it was of a less serious kind he resorted to a rapid, sudden dilatation and rupture of the contracted muscles; and finally, if the suffering was but slight, he prescribed local sedatives—suppositories of chloroform. He obtained the most brilliant success in all cases.

Thus we see that Dr. Simpson was well acquainted with this subject, and without any partiality we must acknowledge him as the first who described this disease, in 1860.

In 1861 Sims read a paper in the Obstetrical Society of London which excited the most lively interest in all gynæcologists by its vivid description of the suffering in question.

We find a full development of his opinion regarding it in the 'Clinical Notes on Uterine Surgery,' 1866. He considers vaginismus as an extraordinary hyperæsthesia of the hymen and introitus vulvæ, connected with a strong and involuntary spasmodic contraction of the sphinct. vaginæ, so

that coition becomes impossible. This spasm can be produced by the slightest touch of certain points. The vaginal orifice is altogether tender, but the sensibility increases about the meatus urinarius, about the aperture of the canal of the Bartholinian glands, and on the posterior commissure. The external or anterior surface of the hymen is sensitive, especially at the base; on passing the sound carefully the internal or posterior proves to be insensible. The touch of the exterior surface not only occasions pain, but an involuntary spasm of the musc. sphinct. vaginæ and ani. Thus the tenderness must be considered as a diagnostical symptom and the spasm as a pathognomonic one. "The most perfect examples of vaginismus that I have seen were uncomplicated with inflammation; but I have met with several cases in which there was a redness or erythema at the fourchette."

Usually the hymen is thick and voluminous and its free edge has the tenseness of a stretched string. Considering the analogy between this contraction and laryngismus, where a similar spasm exists, "I call this painful spasmodic contraction of the mouth of the vagina, vaginismus."

The number of his cases amounts to thirty-nine. As to the cause of the disease he always ascribed it to a new formation of nervous elements (neuromata), though in spite of repeated microscopical investigation of the hymen and other parts performed by his friend, and one of the ablest American pathologists, Professor Alonzo Clarck, no new formation has ever been detected.

According to Sims the treatment must consist in the excision of the hymen, in the incision of the vaginal aperture, and subsequent dilatation by specially adapted bougies. "The last is useless without the first two, but is essential to easy and perfect success with them."

The operation is performed under anæsthesia. This is a brief summary of the views of the American gynæcologist Sims.

In 1861, on the 5th of November, these views were communicated to Scanzoni by Tyler Smith, and the former began to study the subject most zealously. In the course of

three and a half years he saw thirty-four cases, which led him to an opinion greatly differing if not quite opposed to Sims' views. Not one of his thirty-four cases was free from more or less redness, erosions at the os vaginæ; carunculæ myrtiforme in fossa navicular were thick, œdematous, and deprived of their epithelium; in a word, no one of these cases was free from inflammation of the vaginal entrance.

Scanzoni considers this inflammation not as a casual complication, but as the primary affection, caused by traumatic violence during the first attempts to sexual connection, the fault being rather on the side of the man who ignores the direction of the vaginal canal. This assertion is sustained by the fact that in eleven cases out of these thirty-four, the men had had no sexual connection before their marriage. "I know many cases," says Scanzoni, "where young or vigorous but inexperienced men attained the desired aim much later than those who had omitted no occasion to attain a certain dexteritas cacundi before they were married, though with some loss of strength and health."

This ignorance on the part of the man causes an inflammation ostii vaginæ, which in its turn calls forth the pain and the spasm of the musc. sphinct. vaginæ, levator ani, and others, and renders coition impracticable.

The treatment, therefore, must before all consist in the prohibition of intercourse; secondly, in the cure of the inflammation, which can be attained by local sedatives; thirdly, by the dilatation of the vaginal entrance by means of bougies and speculum; and, lastly, to prevent a recurrence of the disease, it is necessary that the wife should herself give a proper direction to the male organ.

As we see, these opinions are essentially different. According to Sims the spasm is occasioned by a hyperæsthesia, and according to Scanzoni inflammation is the cause of the spasm as well as of the hyperæsthesia. Sims considers hyperæsthesia as the predominant symptom, and says that inflammation is only occasional, whereas Scanzoni, on the contrary, considers the inflammation of the vaginal entrance as the first symptom and the hyperæsthesia and spasm as secondary.

Consequently, I think we may be allowed to say that, according to Sims, vaginismus is a pure form of hyperæsthesia, whereas according to Scanzoni it is an inflammatory one. Scanzoni considers the unsuccessful attempts at coition as the real cause of the disease, and Sims supposes them to be a consequence of the suffering. The treatment proposed by them is of an entirely different character. Sims' method is surgical, bloody, Scanzoni's is therapeutical, but both conclude it by dilatation. Sims expresses the conviction that no cure is possible without the excision of the hymen and the incision of the vaginal mouth, and Scanzoni says decidedly "that any case of vaginismus can be cured without operating."

If we want to know the reason of this entire opposition in the views of those two authors we must not expect to find it in the different nature of their cases; we shall see that it lies in the polemical tone of their papers, especially characterising that of Scanzoni.

For instance, out of Sims's own words quoted above, we can see that he denies the presence of inflammation in all pure forms of vaginismus, and at the same time, when describing in his book on surgery one of such cases he says, "The seat of the hymen was red, inflamed, thickened, indurated, and exceedingly sensitive."

Reading Scanzoni's work, we also find more than one contradiction. For instance, "we have frequently seen that in spite of the normal condition of the sexual organs, they were sensible to the slightest touch" (p. 268).

If unsuccessful attempts at coition were the constant cause of vaginismus it would be natural to suppose that if it took place and was followed by gestation and parturition, vaginismus could not perish. However, it is proved that vaginismus continues to exist after coition has been fully performed and normal childbirth had taken place? such is the case recorded by Sims.

Scanzoni was well aware of this fact, but did not pay any attention to it. Here I conclude the critical notice of these two different views. I endeavoured to show partly the entire disaccordance in the opinions of these two authors, and partly

to make you aware of the contradictions in them, which even a superficial reader cannot help noticing. And now I will proceed to my own cases, which, as it seems to me, will enable us to find an explanation for the mistakes of those two authors, and being very typical will help us to reconcile views till now considered as completely adverse to each other.

CASE 1.—Patient an unmarried person of 30 years of age, complaining of a retention of urine. Her menstruation was regular, and a detailed questioning showed no failure in the general health. Two and a half years ago she had been frightened by a fire during the night, and since then noticed the following symptoms. Micturition, which had always been free before, was suddenly stopped by a violent pain in the external genital parts. When the pain subsided water could again be passed freely, but the act of micturition caused pain and spasm of the urethra, and consequently retention; this was repeated a few times until the whole of the urine was passed. However, sometimes this did not occur, and she passed water as usual. To avoid this she tried to pass water frequently, for if the quantity was less she felt the pain only once, whilst a larger amount made her suffer repeatedly. This condition had a depressing effect upon her mind and body, and she looked very bad indeed. The local investigation showed that the hymen was whole and had a triangular shape, with rounded edges; its base was turned towards the urethra, so that there existed a semilunar aperture between the latter and the base of the hymen, which appeared to be quite normal. No inflammation or traumatic damage could be detected; it was even, thin, and rather dry. The os of the urethra was also perfectly normal, neither red nor swollen, and without any erosions. The investigation of the bladder gave an entirely negative result; the catheter could be passed without any pain, and no deviation of the health could be remarked.

When I proceeded to the investigation of the vagina and the uterus, and passed the finger through the os hymen, the patient shrieked from pain, and at the same time the finger

in the vagina was slightly pressed by the spasmodic contraction of the *muscæ sphinct. vaginæ*. The pressure was so slight that it did not prevent me from investigating the uterus, which was anteflexed.

At first sight it was natural enough to suppose that the suffering was occasioned by the displacement of the womb, for a deviation in the functions of the bladder frequently depends on the flexion of the uterus (Hewitt). Therefore, I proceeded to redress it by means of lint pledgets. But when I brought the pledget into contact with the hymen, a stronger spasm led me to suspect vaginismus. I began to investigate the hymen most carefully, and obtained the following result. When I touched with the end of the sound the middle point of the free hymenal edge, a spasm came on and the patient stated that she felt the same sensation as during the retention of the urine. Besides this point I found two other places which were touched with the same effect. The rest of the external part of the hymen was insensible to the touch. Consequently I concluded that the arrest of micturition depended on the irritation of these spots. To make sure of it I tried the following experiment. A catheter was passed into the bladder, and whilst left there I touched one of the spots alluded to, and either the urethra tightened round the catheter, or if the catheter was not far advanced in the bladder, it was violently pushed out. Further, when I withdrew the catheter and dropped some of the fluid upon the same spots, the result was similar.

From this I drew the following conclusion. It is well known that when women pass water a part of it escapes between the large and small lips, and thus reaches the hymen. Consequently in this case the spasm and the retention of the urine were called forth as soon as the fluid reached the hymen, and the irritating cause (the urine) being eliminated the flow became unrestrained. It is easy to understand that in a case like this one the treatment must consist in the excision of the sore points. I proposed to operate on the patient; she promised to return to the hospital, but I have not seen her since.

Considering this case we arrive at the following most interesting conclusion. The patient was a virgin of thirty years, and as much as could be made out by local investigation as well as by questioning no attempts at coition were ever made, and still in opposition to Scanzoni's opinion vaginismus existed. The hymen was normal, not inflamed, and this disagrees with Scanzoni's theory, but moreover, it was neither thickened nor tense as a string, in direct opposition to the opinion expressed by Sims. Hitherto no author mentions that vaginismus can be accompanied by a contraction of the urethra, though all assert the spasm of the vagina and rectum, and this case is interesting because it shows that it does take place.

Thus this case, though rather exceptional, confirms Sims' theory. There were no modifications in the genital parts, no attempt at coition had taken place, and yet the spasm existed ; it is obvious that it was caused by a hyperæsthesia.

CASE 2.—October 16th (1872) I saw at the Maternity a young person, aged 20, who complained of pain in the lower part of the abdomen, extending to the groins and thighs, of leucorrhœal discharge, and of the impossibility of intercourse. Upon questioning her I learned that she had been married four years and was childless. Her first menstruation appeared at 14 years, and the discharge has always been moderate in quantity, painless and coming on regularly every four weeks. After having been married six months she fell ill ; severe pain in the lower part of the abdomen made coition disagreeable and at last quite impracticable. At the same time the catamenia were either too scanty or too profuse, and were always accompanied by strong pain. Coition was prevented by a painful spasm of the vagina, ending in convulsions and syncope, and if insisted upon the spermatozoa were expelled from the vagina with a gushing noise.

This circumstance became the source of displeasure on both sides, and after a short lapse of time brought husband and wife before the court of justice.

Local investigation showed that the fourchette, the poste-

rior commissure, and the fossæ navicularis were red, covered by erosions, and very tender to the touch. The mouth of the vagina was red, swollen, and partly excoriated. It was quite impossible to pass the finger into it, so strong was the pain and spasm. The patient was anæsthetised and nothing prevented a full investigation. The uterus was slightly retroverted. Passing the speculum I noted vaginitis sub-acute, the cervix and cervical canal covered by livid œdematous granulations partly covered by pus. It was a fine case of endocervitis, and the treatment was to consist in the cauterisation of the external os uteri and the cervical canal (acid chromic). The erosions of the vagina and the fourchette were touched with some Liq. Fer. Sesq. Chlor.

The general health was affected by fever and an acute catarrh of the stomach, for which I prescribed soda water and Arg. Nitric. in pills. The patient returned eight days later, and I noted that the fever and the acute catarrh had subsided, the appetite was improved, and the erosions on the fourchette and on the fossæ navicularis as well as in the vaginal mouth were healed; the redness was less intense. The finger could be introduced though with difficulty because of the still existing spasm. However, averting the attention of the patient and using considerable force I succeeded to introduce the speculum, but it caused severe pain. The granulations, were more superficial, redder, and less œdematous.

The same treatment was continued after another lapse of eight days; the passing of the finger was quite painless, the spasm scarcely to be noticed, and the redness of the external parts had nearly subsided. Very little force was necessary for the introduction of the speculum, the granulation had quite disappeared, but the epithelium was wanting.

Since then the patient returned a few times more, the catamenia was regular, and coition could be performed without any pain. But the already existing family discord brought on more trouble to the poor woman; her husband had begun to drink, and treated her so roughly that the former pain in the lower part of the abdomen returned, and

sexual intercourse had to be given up once more. When she consulted me I found that vaginismus existed no more, but endocervitis was very acute. As soon as it was cured coition became easy, and the last time I saw her she was perfectly well. I consider this case as typical and interesting for the following reasons. Having seen the patient very often I could ascertain that the constant cause of the vaginismus was the inflammation of the cervical canal (endocervitis), for the symptoms of vaginitis subsided after her first visit to the hospital, but the spasm persisted until the endocervitis was quite cured. Further, the symptoms of the vaginitis were less marked than those of the endocervitis, and could be considered as secondary. It is obvious that vaginismus was occasioned by an inflammation of the cervical canal, and thus this case fully agrees with Scanzoni's theory, for the cause of the disease was material and organic.

A subsequent dilatation advised both by Sims and Sanzoni had not to be recurred to.

CASE 3.—Patient, 25 years, was brought to the hospital by a midwife, and gave the following account of her state of health. As a child she had always been well; menstruated at 13; since then catamenia were always regular and lasted six days. At 17 she suffered from hysterical attacks ascribed by the physician who attended her at the time to a catarrh of the stomach, which being cured, the fits returned no more. Five years ago she was married to a gentleman rather advanced in age (43). During the first week after her marriage no intercourse took place, for in spite of all his efforts her husband was impotent and no violence could be committed. After this period the impotentia on the side of the husband subsided, but all attempts to coition were fruitless for the wife felt such strong pain at his approach, that it had to be given up altogether. This state of things lasted five years; all their repeated attempts at different intervals were of no avail, and it is easy to understand that this kind of life had a very bad influence on the health of both. The husband looked older than his age, and the

lady was very nervous and hysterical. She had no idea of the cause of her disease, and seeing her husband suffering through it, began to meditate suicide, for life to her was a constant trial. The poor woman could not refrain her tears whilst telling me her sad story. A month previously she had consulted a physician, who had prescribed the use of narcotics, pessaries, and dilators. It is scarcely necessary to say that neither could be employed, for every touch of the genital parts occasioned the most severe pain.

The patient was laid upon a table and I proceeded to the local investigation. Parting the large lips I saw that the hymen did not exist. The small lips were quite normal, though less red than usual, and if touched gently free from pain. The meatus urinarius and the urethra were equally normal and not tender to the touch. In the groove between the large and small lips, nearer to the latter, on the posterior part of the vulvæ, eight scattered papillæ could be detected; their ends were widened and ramified, even and rough from the loss of the epithelium. They were of a livid bluish colour rather œdematous, but no blood oozed out of them. When I touched them with the sound or with a camel's-hair brush, the patient complained of a sudden acute prickling pain extending to the lower part of the abdomen. When the irritation was continued, the patient began to tremble all over the body, the face was contracted, the teeth gnashed and the widely dilated eyes filled with blood. Carefully parting the labia minora, so as not to touch the papillæ, I could see that the vaginal mouth had its usual appearance. It was quite impossible to pass the finger, for however carefully I tried it the patient shrieked out with pain and escaped from my hands. Therefore I anæsthetised her, but in spite of her full unconsciousness the introduction of the speculum still presented great difficulties. The vaginal spasm and the resistance of the patient were so great that I had to use unusual strength to push it into the vaginal mouth, and could not succeed in separating the blades.

When she awoke from the narcosis she said that she had not felt any pain at all.

I told her that I considered the operative method as the only one able to restore her health, and she gladly consented to be operated upon.

Accordingly, chloroform was administered to a degree of full narcosis; neither pinching nor pricking produced any effect, the limbs were in a state of complete helplessness. During the operation I was assisted by two of my colleagues, three very strong midwives, and two nurses. Parting the large lips I endeavoured to get hold of one of the nearest papillæ by means of a sharp forceps; the patient sprang up, and though held by four persons the pelvis could not be brought to a fixed position. Chloroform was again administered as long as pulse and health allowed it. This time I succeeded in getting hold of all the papillæ and cut them out, with the underlying tissue in the form of a long shred, a few lines thick. I had great difficulty in performing that operation, and succeeded in it only by the aid of those who assisted me, and had to use the utmost strength to keep the pelvis steady. When the patient recovered from the narcosis she again said that she had felt no pain whatever. I prescribed irrigation of the sore place three times a day. The first two days after the operation she felt some pain at the touch of the syringe, but the pain was of a quite different character; it was rather dull instead of the former acute sensation. The spasm was as strong as before. After two days more, when the raw spot began to heal, the irrigation produced no pain at all. The finger could be passed through there with a slight pressure. During the investigation I noticed that if the sore place was touched no painful sensation was called forth and the finger could be passed much more easily. The patient told me that now the vaginal spasm was no longer spontaneous, that it was excited by the painful recollection of her former suffering. In order to accustom the vagina to the presence of a strange body I prescribed the subsequent use of sponge tents three times a day. Seven days after the operation I noted the following change: the bared place was nearly healed, the finger was passed freely without any pain, the pressure was very slight. The use of sponge tents was con-

tinued, and nine days later two fingers could be passed and the spasm had nearly subsided. I then advised her to submit to coition, but she told me the next time I saw her, no intercourse took place, because she could not get over her fear. I then prescribed her the daily introduction of the three-bladed conical mirror, and seven days later the matrimonial aim was attained for the first time by this couple who had lived together for five years already. The patient returned no more. I consider this case interesting for the following reasons: 1, the impossibility of sexual intercourse became evident at once without any previous attempts at it, for during the first week of the marriage the husband was powerless; 2, in spite of the many and repeated attempts at coition all inflammatory symptoms were absent; 3, the cause of the disease lay in the papillæ mentioned above, and they were nothing else but the remains of the hymen, 4, the treatment could only be surgical, for even under chloroform no dilatation could be performed without the excision of these points *doloureux*. "I think that this case can be duly stated as a confirmation of Dr. Sims' theory."

✓ I think this paper shows that there are two different forms of vaginismus.

1. The first ought to be designated as pathological or organic. To this belong all the cases where the disease is based on a material and organic change, occasioned by traumatic affections or by any disease, of which inflammation of the vaginal mouth (Scanzoni) is the most frequent, but which can also have their seat in some other part of the female sexual apparatus.

Thus we have reason to doubt neither the cases mentioned by Scanzoni, nor the theory he bases on them; his mistake is to view the question from one side only, to give the same explanation for all kinds of different cases.

The second variety can be designated as the nervous, for it is deprived of all organic material modification and new formation (*neuromata*), and consists in the hyperæsthesia of the hymen or its remains (Simpson's case is an exception).

To this second variety belong most of Sims' cases and two of mine (1—3).

2. In both varieties we may meet with the spasm of the whole vagina—"vaginismus completus seu totalis," or with a partial spasm, as stated by Simpson, "vaginismus incompletus seu partialis."

3. Our first case proves that the muscles of the urethral canal can partake of the spasm as well as those of the vagina and rectum.

4. It is undoubtedly proved by clinical experience that complete coition and parturition do not annihilate vaginismus.

5. The attempts at coition, contrary to Scanzoni, cannot be considered as a constant cause of vaginismus, though they may call it forth occasionally.

6. Contrary to Sims, the spasm may persist in spite of the anæsthesia.

7. In the pathological cases the treatment ought to be chiefly therapeutical and mechanical. In the nervous, the chirurgical method combined with dilatation must prevail.

8. The incision of the vaginal mouth proposed by Sims cannot be adopted in every case.

The PRESIDENT remarked that he had only met with one case where no tangible cause existed. She was very nervous and subject to epileptic fits. In all other cases some definite cause for it had been discovered, such as ulceration, &c. He considered Dr. Marion Sims' operation very rarely necessary, forcible dilatation under chloroform by means of the two thumbs placed back to back being generally sufficient to overcome the obstacle.

Dr. Edis thought, after carefully perusing the paper, that the deductions drawn from the first case cited scarcely carried conviction. She was a virgo intacta, and was only seen once. The second case seemed due to vaginitis and granular cervix. The paper was a most instructive one, and would form a valuable addition to the 'Transactions,' the cases being given in a clear and graphic manner, and the observations on their pathology and treatment well worthy of perusal.

Dr. JOHN WILLIAMS remarked that in the first case alluded to by Dr. Edis there were three distinct painful spots which, when touched, caused spasm of the urethra. He thought the paper one of great interest.