ther throughout the body. But this great discovery has been no help to us in the choice and application of remedies. True! there is a palsy of motion and a palsy of sensation, when they are distinct diseases. And there is a palsy of motion and sensation combined, and the disease is mixed. But whether the palsy be one or the other or a combination of both, it has not, therefore, its own treatment; and remedies cannot reach either order of nerves except through the entire nervous system and the body at large.

Lectures

ON

DISEASES OF WOMEN AND CHILDREN.

DELIVERED AT THE SAMARITAN HOSPITAL.

BY

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LECTURE II.

THE CONSEQUENCES OF ENDOMETRITIS.

[Concluded from page 539.]

VI. HYPERTROPHY OF THE UTERUS. This disease may be confined to the cervix, to the body and cervix, or may involve the fundus also. I propose only to refer to the first two varieties to which M. Huguier of Paris has of late called attention; and I shall follow him in these remarks.

Longitudinal hypertrophy of the cervix is of two kinds: 1. The *subvaginal*, or where that portion of the cervix which lies within the vagina is lengthened; 2. The *supravaginal*, or that in which that portion of the cervix which is continuous with the body of the uterus, and lies without the vagina, is elongated.

1. *The Symptoms of Subvaginal Hypertrophy of the Cervix* are general or local. The general may be sometimes entirely absent. In some, even, menstruation goes on normally. But this is the exception. In most cases, the symptoms are well marked. Some women complain of a feeling of weight about the parts; some of a new and peculiar sensation when in the sitting posture, with pressure in the fundament and vulva, or internally within the abdomen. The chief pain, however, is felt during coition. The pain then experienced amounts sometimes to agony; and this it is that often leads patients affected with this disease to seek your assistance. The functions of the bladder are seldom disturbed; that of the rectum often is. Constipation is commonly present. Sometimes defæcation is very difficult; indeed, in one of Huguier's cases, the patient could not defæcate at all unless she threw herself completely backwards.

Local Symptoms. When the finger is passed up within the vagina, the prolonged os can be readily felt projecting from one to three inches. Sometimes it actually projects out of the vagina, resembling the glans penis. The sound penetrates within the uterine cavity from four to five inches. There is always uterine as well as vaginal leucorrhœa, sometimes coloured, occasionally bloody. The prolonged cervix varies in appearance; sometimes one lip, or

part of one lip only, is prolonged. In many of these cases, we have suppression of the menses, or dysmenorrhœa; in others, actual menorrhagia. Sometimes the disease develops itself very rapidly, it is said, after intense metritis, a laborious labour, or a fall. The erect position is often so painful that the patient is compelled to lie down.

Causes. I believe, with Dr. T. Smith, that the irritating character of the uterine leucorrhœa is the common cause. This leucorrhœa itself is due to endometritis. In incipient cases, you will often notice a marked redness of the cervical mucous membrane, and tenderness of the os and lining membrane, when the prolonged cervix has been free itself from pain. Abuse of the sexual function, combined with a short vagina, is also a common cause; hence its prevalence among prostitutes. In these cases, the deep arteries of the cervix are larger, and the veins very full of blood: hence one reason of the tendency to hypertrophy, and, in more severe cases, to actual ulceration. It seems, moreover, to be the tendency of the uterus, as it is of the vulva, to become hypertrophied whenever irritation exists about the parts. We all know how commonly, after syphilis, the labia become a source and seat of irritation—become indurated and hypertrophied. So it is in this affection, though unconnected with syphilis.

Treatment. With old women, and in moderate cases, astringent injections, rest of the organ, decubitus, lunar caustic, and leeches, will often suffice. If these fail, the stronger caustics may be used, such as nitric acid, fluid nitrate of mercury, potassa fusa, or, as commonly practised by Jobert, the actual cautery. One objection, however, equally applies to all these caustics: they give rise to an immense amount of local congestion and inflammation before the slough produced by them can be thrown off. Formerly I used to cut up the os with my lancet, turning it in several directions, and then applying a strong solution of nitrate of silver to check the bleeding. In two remarkable cases in which I did so, the success was complete, and the prolonged cervix completely disappeared. The practice, I am convinced, is good. The more simple plan, however, is that of resection. The danger of it is hæmorrhage. Huguier, however, says this may be always repressed by plugging and perchloride of iron; and he cites ten cases of successful operation by this plan. In this hospital we use the *écraseur*. We have done so lately in three cases most happily. The *écraseur* should be used as much as possible *in situ*, without drawing down the uterus, lest by so doing you injure and cut through the posterior peritoneal *cul-de-sac*. Care should also be taken not to include the bladder, which once occurred to Langenbeck. If the *écraseur* be applied about two lines in front of the insertion of the vagina to the cervix, this accident is avoided. By using the curved chain with the *écraseur*, you run less risk of wounding the posterior peritoneal *cul-de-sac*, which comes lower down than the anterior. In cutting through the uterine tissue with the *écraseur*, the resistance of the part and the force required are very great. No hæmorrhage succeeds. It is well, in a day or two after the operation, and when all risk of hæmorrhage has gone by, to pass a sound within the os, to avoid retraction or constriction of it. As it is, you have always, after the *écraseur*, a puckered state of the vagina around the os, which is narrowed circularly, but otherwise

healthy. The only internal remedy which I have given in these cases is mercury in small doses, to promote absorption.

2. *Supravaginal Longitudinal Cervical Hypertrophy* is a more important disease than the former, and, since the publication of M. Huguier's memoir, has given rise to much controversy. He believes this affection is often confounded with prolapsus uteri, which last is a rare disease. In fifteen years he has examined sixty-four cases of supposed prolapse. Only two, however, were so. In one, aged 61, it occurred after a violent effort. In another, besides the prolapse, there was longitudinal hypertrophy and complete retroversion also. Now, upon this point I must say that I believe the percental proportion of the prolapse cases is greater. On the other hand, I am bound to add that, in many, longitudinal hypertrophy coexists with the prolapse. Indeed, to use the patient's expression, "it goes up when they lie down". To give this subject full justice would occupy not one, but several lectures. In the few minutes left me, therefore, I must be content to epitomise M. Huguier's views.

General Symptoms. Bearing down pains; back-ache, increased in the erect, diminished in the recumbent position; a sensation of sinking or of void at the lower part of the abdomen, as patients say, "as if the bowels were coming away"; leucorrhœa often bloody; ardor urinæ; micturition sometimes impossible till after reduction of the parts; defæcation generally not difficult. Sometimes, owing probably to adhesions, there is a painful drawing down sensation at epigastrium, with cardiac oppression and intestinal pain to so great a degree that, if the erect position be long maintained, syncope will result. In the end, we have general dyspepsia and a tendency to menorrhagia.

Local Symptoms. The os feels large, and appears to be circularly hypertrophied low down in the vagina, or completely without the vulva. There may be rectocele; commonly there is cystocele, more or less complete. The finger can thus be made to pass through the rectum, between the uterus and vagina, out of the vulva; and the catheter has to be introduced from above downwards and forwards. If the supravaginal portion of the cervix be felt through the prolapsed vagina, it is found enlarged circularly at its vaginal end, but thin and lengthened only from this end towards the uterus. The os is generally large, circular, or semilunar. The fundus uteri can be felt within the pelvis, behind the pubes, which shows that the hypertrophy is chiefly confined to the supravaginal portion of the cervix. The sound (on which, after all, the diagnosis depends) penetrates from four to five inches. In the anatomical relation of parts, it is important to notice the relative positions of the peritoneal *cul-de-sac*. As the body of the uterus usually keeps its relations with the bladder, the vesico-uterine or *anterior peritoneal cul-de-sac* has therefore generally maintained its normal position. Its depth is from $2\frac{3}{4}$ to $3\frac{1}{2}$ inches. In every case, the lower border of it is situated at least $2\frac{1}{4}$ inches from the border of the os; so that, if resection of only $1\frac{1}{2}$ to $1\frac{3}{4}$ of an inch of the cervix be practised, you run no risk of wounding the peritoneum. The vagino-rectal or *posterior cul-de-sac* has, on the contrary, followed the lengthening of the organ in every part, and also the reverted bladder. It comes, therefore, much

lower down than the anterior. In depth, it varies from $4\frac{1}{2}$ to $7\frac{1}{2}$ inches; and its inferior extremity (owing to the excentric hypertrophy of the vaginal portion of the cervix) is situated at nine-tenths to $1\frac{1}{2}$ of an inch above and behind the posterior border of the uterine orifice. If this excentric hypertrophy do not exist, then the inferior extremity of the posterior *cul-de-sac* is only from one half to two-thirds of an inch, at the most, distant from the os. If we have complete vaginocœle superiorly, then the posterior *cul-de-sac* may descend below the aperture of the os.

Causes. I laid stress before on the thin elongated supravaginal cervix. This character alone indicates that it was lengthened in the direction and around the canal; showing, probably, the first connexion with endometritis. Other causes, however, are assigned—a phlegmatic habit, large pelvis and vulva, etc., a fat belly, prolapsed vagina, continued constipation. The most common, however, is childbirth, doubtless combined with more or less endometritis. Out of Huguier's sixty-four cases, four only were childless; eleven had had one child, and forty-four several up to nine or twelve children. Out of Scanzoni's one hundred and fourteen cases, ninety-nine were mothers. Huguier believes they are more common after the use of forceps, and they sometimes appear to be suddenly developed on lifting a heavy weight; yet a careful inquiry into their previous history almost always establishes the existence of uterine disease for years previously. With a large flabby vulva, and endometritis with congestion, the appearance of the uterus externally is more than probable.

Treatment. Nothing but the knife or the *écraseur* offers any prospect of cure; and here I must almost entirely follow M. Huguier, as I have not hitherto performed the operation.

1. *Preparation for the Operation.* Select the period immediately following menstruation. Compel your patient for several days previously to occupy the recumbent position. Purge freely the day previous. Determine to the skin of the thighs and hips by inunction with tartar emetic ointment or croton oil; and then do not operate until the eruption thus produced is at its height. On this point M. Huguier lays great stress. Lastly, keep the extremities warm. The instruments required are, a sound, pair of pincers, vulsellum, bistouries probe-pointed and straight, long ligature-forceps, needle-holder and needles, tenaculum, or, better still, a circular needle with moveable point, to serve as a tenaculum if need be; bent pins (fishhook shape) attached to a piece of thread, ligature-thread, a gum-elastic catheter, and *écraseur*.

M. Huguier divides the operation into four stages. *First Stage.* Placed in front of the woman, he seizes forcibly with the vulsellum the inferior extremity of the cervix or the posterior lip of the os. This is pulled gently upwards and forwards, so as to be brought in front of the pubes. This traction renders the posterior wall of the vagina tense, which is thus more easily cut, and removes the parts from the posterior *cul-de-sac*. Confiding now the vulsellum to an assistant, he passes his finger into the rectum, to note the situation and depth of the posterior *cul-de-sac*. This finger is the *operator's compass* in this stage. Next, by a horizontal and semilunar incision, he cuts through the posterior

wall of the vagina, the concavity of which, directed upwards and forwards, embraces the posterior half of the cervix. The incision is made in the insertion itself of the vagina to the parts, and ought to be kept within the limits of this insertion. By making it on another point, you might either open the peritoneum, or leave a portion of the diseased neck. This incision is, therefore, made at a variable distance from the os, according as to whether the vaginal portion of the cervix has kept its normal dimensions, or has become engorged and excentrically hypertrophied. In the former case, the incision is made at a distance from the os of rather more than half an inch, in the latter at a distance of from one inch to one inch and one-fifth of an inch. Directing the knife from below upwards, and from behind forwards, there is less risk of wounding the peritoneum. The first incision should be promptly and boldly made; the other incisions, which are in the same direction as the axis of the uterus, should be executed slowly and with great care. Again, while the operator, with the index of his left hand within the rectum, introduced directly through the posterior *cul-de-sac*, follows and guides the action of the blade, and that with the thumb of the same hand kept outside, he pushes upwards and behind the lips, as well as the posterior plane of the incision; the assistant in the meanwhile gently and gradually draws the cervix upwards and forwards. Soon the resistance of the parts to the action of the knife informs the surgeon that he has reached the uterus. From this period there is no fear of injuring the peritoneum. The finger may now be removed from the rectum. Force and boldness in the last part of this incision are required, as the tissue is resistant, until the uterine cavity is reached, when all resistance ceases. The finger follows the knife. The operation is begun from below, because—1. This is the most difficult and delicate stage; 2. Should you wound the peritoneum, you can suspend the operation; 3. The parts are best seen, and less likely to be concealed by the effused blood inferiorly. The arteries met with are easily tied.

Second Stage. The danger here is the fear of wounding, not the peritoneum, but the bladder. To prevent this accident, you first introduce a catheter, which is the compass in this stage, into the bladder down to the prolongation over the uterus. Then you raise this part so as to see it. Giving this catheter to an assistant to hold, the surgeon now seizes the anterior lip of the os with a vulsellum, and confides it to another assistant, who pulls it downwards and backwards. By this double movement in opposite directions by the two assistants, the prolongation of the bladder is drawn away from the cervix, and the tissues to be removed are well exposed. The surgeon next divides, at a distance of about half an inch or rather less below the distal end of the sound, the anterior wall of the vagina, practising an horizontal and semilunar incision, which embraces the cervix, and meets that of the opposite side. This section is not to be made at first right down to the cervix, lest the bladder be wounded. The sound is now withdrawn, and with the finger the operator forcibly detaches the bladder from the uterus, with occasional assistance of the knife to remove intercellular tissue. This separation may be extended to $1\frac{1}{2}$ to $2\frac{1}{2}$ inches. Trans-

versely, however, it should not extend further than half an inch, lest the ureters be wounded. The arteries met with in so doing are tied.

Third Stage. The surgeon, now directing an assistant to hold up the separated bladder behind the vestibule, seizes with the left hand the anterior portion of the cervix, stretches it tightly, and then divides it by cutting with a bistoury from below above, and from before backwards, so as to go up within the uterus. Before completely cutting the cervix off, he ties the arteries of the uterus, if large enough to require it. This is important, as afterwards the uterus may be drawn upwards above his reach. This accident occurred once to Huguier. It is prudent, therefore, to seize the posterior part of the posterior lip of the cervix by a vulsellum, lest the part last cut of the anterior lip should contain a large artery. The cut portion of the uterus left is concave, that removed conical.

Fourth Stage. The cervix so cut, the uterus is now reduced to its proper position. The uterine concavity made is filled up with cotton, in the centre of which is a gum elastic catheter, and the whole is secured by a T-bandage. To keep the bladder empty, another is placed in it, but not allowed to penetrate further than from one to one-third of an inch. The patient is put to bed with elevated buttocks. The extremities are kept warm, and the eruption maintained. If there be any oozing of blood, you apply some cotton covered with resin powder; or paint the exposed uterine surface with perchloride of iron, avoiding, however, to let this last to flow in the vagina, as it is a caustic, and will retard the healing process. As to *tying the arteries*, this is easily done with those of the vagina and cellular tissue, and in the usual way. Not so with the uterine vessels. They cannot be seized with the forceps; or if you should succeed in doing this the ligature will not hold. Hence a bent needle with thread attached should be used. In this way, the artery cannot retract within the uterine tissue. If you use the *écraseur*, you cannot do so till you have separated the vagina and bladder, etc., from the cervix. Huguier, however, prefers the knife, as less painful, and because, by enabling you to remove a conical piece of it, you take away more of the uterus. If the posterior *cul-de-sac* has been wounded, you must suspend the operation altogether. If the bladder, the consequences are only temporary delay, and the application of additional ligatures.

The immediate result of the operation is usually slight fever at night with uterine colic, but even these mild symptoms are occasionally absent. One case of Huguier's got up with impunity the night of the operation. Some patients have had nervous symptoms and vomiting, with rigors. Generally there is oozing, but to no extent. From the fifteenth to the twentieth day, the parts have cicatrised. The vaginal portion is then observed to be puckered around a small projecting cervix in the centre of which is the os. A relapse after the operation is purely theoretical, and could only occur from want of tone in, or a torn perinæum with large vulvar opening.

VII. STERILITY. The last result of endometritis to which I shall refer is *sterility*; and I shall be very brief. In cases of stricture, either of the external or internal os, you can readily understand that impregnation is not possible. The same applies to stricture of the Fallopian tubes. All these re-

sults occasionally follow endometritis. Again, menorrhagia, or copious uterine leucorrhœa, by washing down the spermatozoa, and preventing their retention within the uterus, or passage into the Fallopian tubes, will also give rise to sterility. But the secreted fluid may be so changed by the endometritis as to produce the death of the spermatozoa; the uterine mucus being normally alkaline and the vaginal acid. Donné proved, by experiment, that the spermatozoa live in these fluids, if healthy, single or conjointly, and move actively in them for several days. In disease, however, where the vaginal fluid is very acid, or during pregnancy, during which state this fluid is always unusually acid, the spermatozoa in contact with it perish in a few seconds. It is stated by Dr. Whitehead, that this is owing to the diseased nature of the uterine mucus, or its absence, as in pregnancy, which does not neutralise the excessive acidity of the vaginal mucus. Dr. Tyler Smith states that excessive alkalinity of the uterine mucus may have the same effect; and it is easy to understand that, if the uterine mucus be so acrid as to excoriate the os or corrode metallic instruments, as it often does, it must prove fatal to the spermatozoa, and hence impregnation is impossible. The remedy for the sterility is, therefore, to cure the endometritis present.

One word of caution, and I have done; for I cannot now discuss the question at length. Gonorrhœa of a very severe kind may be the result of intercourse with a woman affected with endometritis. I have known several bad cases of this kind, the more painful because occurring in families of distinction, and where it was not possible to assign the gonorrhœa to infidelity. The knowledge of this fact is important; because it often enables us to restore harmony in conjugal life. It is another reason also, even if the separation itself was not often a means of cure, why the sexes should not be allowed to come together where the female is affected with severe endometritis.

SIR H. HOLLAND'S ESSAYS. The book begins with a paper on "the Progress and Spirit of Physical Science," which is itself a miniature of the entire work, a survey of science from the highest point of view. Then we have an essay on "Life and Organisation," which deals chiefly with the initial forms of life, and the most general understanding of the vital principle. Next comes an article on "Human Longevity"—a title which explains itself. Passing by the pages devoted to Roman history and Julius Cæsar, we reach the next topic, which is the "Physical Geography of the Sea"—a science unknown till within the last few years. Akin to this is the following paper on "The Mediterranean Sea." In the essay next in succession will be found the most succinct, the most interesting, and the most philosophical account of "Meteors and Aerolites"—the information afforded being always the most recent. When the reader has exhausted the subject of falling stars, he will turn with undiminished appetite to the subsequent paper on "Sidereal Astronomy;" and when he has exhausted that, he will go for a change to the next subject, which may be classed rather among the amusements than the serious occupations of science—"the Coral-reefs" of Australia. After this we find ourselves deep in a paper on "Dalton and the Atomic Theory," and in an equally suggestive discussion on "Modern Chemistry"—the most fruitful branch in modern science. Finally, we are invited to complete the round and to consider "the Natural History of Man."

Illustrations OF HOSPITAL PRACTICE: METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

PRACTICAL REMARKS ON THE PATHOLOGY AND TREATMENT
OF SKIN-DISEASES.

By C. HANDFIELD JONES, M.B., F.R.S., Physician to the
Hospital.

[Continued from page 517.]

Herpes differs notably in appearance from *eczema*; yet the resemblance between these disorders is so close that the puzzle is to say why they assume different forms. Both develop serous vesicles on an inflamed area; both are wholly surface affections; both are extremely common, and seem rather referrible to some generally acting cause than to any peculiar diathesis or morbid state. It is interesting to remark that one local variety, *herpes labialis*, has been noticed to have some especial connection with inflammatory catarrhs, bronchitis, or pneumonia. Dr. Salter says that numbers of people never have catarrh unattended by *herpes labialis*. This is worth noting, with reference to the view that *eczema* is an affection also allied to catarrh. The chief clinical facts about *herpes* are that it tends to affect the cutaneous surface near its junction with the several mucous tracts; that it sometimes appears on the mucous surface itself; that it has a tolerably definite course; is never chronic; is not much under the influence of treatment; and has a certain relation to catarrh and to neuralgia.

It seems to me that it is scarcely possible to consider *herpes zoster* as essentially different from the other forms. The chief dissimilarity appears to be that *zona* is attended with more neuralgia, and more evidently follows the course of certain nerves. But, when we consider how limited neuralgic affections may be, it does not seem to me unreasonable to suppose that irritation of trophic nerves, such as Von Bärensprung has shown is competent to produce herpetic eruption, may be equally limited. According to this view, all herpetic eruptions would result from irritation of nerves; but in common *herpes*, the trophic nerves only would be affected, and probably only those of one or two nervous twigs; while in *zona*, when well marked, a larger trunk would be involved, and not only the trophic, but the sensory nerves. It is well known that the demi-cincture of *zona* may be very incomplete; perhaps, only one or two groups being present; in this case, as Cazenave remarks, it might be taken for *herpes phlyctenodes*; though the distinction may often be made by finding other patches at the opposite side of the body, or between the anterior and posterior groups little red points indicating the commencement of intervening patches; besides, the mistake would cause no inconvenience, seeing they are, *au fond*, two similar disorders. The effusion of bloody serosity into the half-filled vesicles seated on livid areas, and ulceration or sloughing of the skin at their bases, are not uncommon occurrences in severe cases of *herpes zoster* affecting the weakly and aged. It seems to be a necessary inference that these changes result from depressed vitality of the skin; and that, as we must believe the pathological process in all cases of *zona* to be the same, it is the state of vital energy of the cutaneous tissue which determines what the effect of the nerve-irritation shall be; whether it shall produce patches of bright inflammatory hyperæmia, dotted over with vesicles plumply filled with seropurulent contents, desiccating, and