Lectures

ON

DISEASES OF WOMEN AND CHILDREN.

DELIVERED AT THE SAMARITAN HOSPITAL.

BY

CHARLES H. F. ROUTH, M.D.,
PHYSICIAN TO THE HOSPITAL.

LECTURE II.

THE CONSEQUENCES OF ENDOMETRITIS.

[Continued from page 455.]

V. DISPLACEMENTS OF THE UTERUS. *Anteversion and retroversion of this organ* are sometimes the result of endometritis. But, first, one word as to the normal position of the uterus. Cruveilhier asserted that, except in children, this organ had no normal position. Boulard showed, however, that in children and young women the axis of the body of the uterus was nearly horizontal, while the cervix was placed in the direction of the axis of the pelvis. Aran has also proved, both anatomically and statistically, that the normal direction is one of ante-flexion or antecurvature. Thirty-seven examples were examined. Two of these, however, in which there were coexisting adhesions, should be, properly speaking, excluded. Sixteen of these women were virgins, or had not borne children. Ten of these, or fifty-eight per cent., had ante-flexion. Of the remaining twenty-one, who had borne one or more children, seven, or thirty-three per cent. only, had also ante-flexion. The effect of child-bearing is thus to cause the uterus to assume the direction of the axis of the pelvis; but in very young women, virgins and children, the body of the uterus is anteverted, while the cervix, following the axis of the outlet of the pelvis, forms with the body an acute angle. (Aran, p. 20, *et seq.*) Hence, one reason why retroversion is so much more common among women that have borne children than among virgins. The causes of both displacements are nearly identical. It is usually stated that if there be increased weight on the posterior part of the uterus, retroversion will occur. On the contrary, if the organ be heavier anteriorly, anteversion will take place. These natural declinations, if I may so term them, are assisted by a retention of faecal matters within the rectum. I believe in London, however, that a very common cause of these malpositions is congestion of the uterus which accompanies metritis, as well as the third and fourth varieties of endometritis. You will remember, at the outset of my first lecture, that I dwelt upon these points: 1. The thickness of the mucous membrane of the uterine cavity; 2. Its close connexion with the uterine parenchyma, and vascularity; 3. The intense congestion observed to accompany endometritis in the uterus itself. When you look now to this diagram, you will see how great the superincumbent weight of the body and fundus of the organ must be upon the cervix. Perhaps, also, the very presence of the sphincter muscle between the cervix and body, by keeping the uterus smaller at this part, weakens the resistance here, particularly if the parts be softened also by inflam-

mation at this point. In my experience, I should say that anteversion is commonly produced in this manner. Retroversion, however, requires something more: a sudden fall, unusual exertion, or lifting up a heavy weight, over-walking, etc., one or other of which determine the displacement posteriorly. In every case where I have made the inquiry, I have traced one of these exciting influences in operation, immediately succeeding upon some attack of metritis or endometritis. In a very able paper, Dr. Moir of Edinburgh denies the concurrence of metritis, but admits the other causes named as producing the version.

Writers usually make a distinction between retroversion and retroflexion of the uterus. The difference is, however, only one of degree. The affection is readily made out. If the finger be passed into the vagina, the os and cervix are found tilted upwards and directed towards the symphysis pubis. Between the vagina and rectum, high up, a globular hard tumour, varying from the size of a walnut to that of an egg, is felt superiorly. The sound introduced in its usual direction, and with its usual curvature, penetrates only a short distance; but when turned in the opposite direction, and much bent, which it often requires, and the handle raised towards the pubis, a little jerk is felt, and it penetrates to the full extent. If the sound be now gradually turned, so as to occupy its usual position with the concavity upwards in the uterus (except where adhesions exist), the organ is at once reduced; and if the finger be now introduced into the vagina, the tumour before felt between the rectum and cervix has disappeared. In anteversion, the os is directed backwards towards the sacrum. If one finger of one hand be placed within the vagina, and the other hand be placed just above the pubis, and pressure made, the uterine fundus may be generally felt lying upon the bladder: except in very fat subjects. The concavity of the sound to allow its admission also requires to be very marked, while the handle is directed backwards towards the sacrum.

Neither anteversion nor retroflexion give rise necessarily to troublesome symptoms. Some patients, indeed, appear after a little while to be unconscious of there being anything wrong with the womb; and this is especially the case with anteversion, once the acute symptoms have subsided. This freedom from discomfort is also more common with virgins and widows and women who do not live in a conjugal state. In some cases, however, where the endometritis persists, then the sufferings are so distressing that life becomes miserable to a degree, particularly to wives. There is pain about the pelvis; also a sensation of weight and dragging down, pressure over the rectum, pain in the thighs, difficulty and frequent desire of micturition, with copious leucorrhœa. These symptoms, due to exaltation of the entire sensorium of the parts, are increased in severity by the erect position or connexion. Such patients are also usually very hysterical. In retroversion, there is more back ache and constipation, less dysuria, and the pains in the thighs are more posterior and external. In anteversion, the pain is in the hypogastrium, the vesical disorder more marked, and the pains in the thighs more anterior and internal. In the diagnosis, there is sometimes a difficulty in distinguishing incipient cellular abscess, situated near the posterior *cul-de-sac*, from retrover-

sion. The throbbing in the former is, however, more marked to the finger; the sound, moreover, in the former passes up in the normal direction.

The treatment usually prescribed is local depletion by leeches, rest, and free evacuation of the bowels. This is, in fact, the ordinary treatment of endometritis; and in recent cases, with occasional reduction, if need be, by the sound, it will succeed. But the bleeding must be copious to do good, and it is not every patient that can bear it. In one case of complete retroversion, where I applied six leeches, it so happened one of the leeches bit upon a superficial artery. The bleeding was profuse, but a cure resulted in thirty-six hours. In more chronic cases—and these are most common—and especially in those in which the uterus, even if reduced by the sound, will, on its withdrawal, at once fall back again, what are we to do? Now, I can only speak of four measures which have been recommended, and they are founded on the use of specific instruments—Dr. Simpson's intrauterine pessary, Dr. Moir's gutta-percha pessaries, Dr. Evory Kennedy's supporter, and my own spiral wire pessary.

Dr. Simpson's instrument is now before you. Once applied, it effectually keeps the uterus in place. Unfortunately, however, it is seldom borne by our London patients, the endometritis present making it too painful; and I have seen it give rise to very serious symptoms and metritis. I think, in this respect, London differs from Edinburgh. I learn, from a private letter from Dr. Moir, that endometritis is rare in the Edinburgh retroversion cases, whereas here it is very common. Dr. Moir's pessaries are here figured, and on the table. They consist of gutta-percha stems, of various sizes, fixed on a circular disk. These stems are of uniform diameter throughout from top to bottom. In some, however, there is a bulb or dilatation upon it, which is placed about the middle, so as to lie just within the body of the uterus above the cervix. Dr. Moir found that the lower portion of the stem was too thin, and was therefore apt to cut through the os inferiorly. Now he uses a stem of wider diameter. He admits the plan is occasionally unsuccessful. The application is made as follows. First, dilatation of the uterus is effected by sponge-tents. Each tent is kept in one or at most two days; beginning with a smaller size until he is enabled to introduce one about the thickness of a thumb. He finds, however, that from two to three weeks elapse before he can, passing through the intermediate sizes, attain to one of the required magnitude. A wire pessary, covered with gutta-percha to the size of about half an inch, is now introduced into the dilated uterine cavity, and allowed to remain for one and at most two days, and then replaced by one half the size, and so on, till in three or four days the smaller sized wire pessary is introduced, and retained for five or six days. The patient is kept in bed for a week or two after its removal, and watched lest the organ should be again retroverted. Then the reintroduction of the small wire pessary would be indicated, or the prone position, but he says he has not yet found it necessary after carrying out this plan to reintroduce the wire pessary. If, during the week or two which the patient keeps her bed, the tendency to retroversion does not exist, the patient may be allowed gradually to resume her habits, attention being had to the keeping the bowels open, and avoiding all straining or violent

exertions. To obviate the expense of sponge-tents, Dr. Moir had thought of using gentian root and India-rubber pessaries. Against the use of the first there is a fatal objection which he admits, the danger of their breaking. I may remark also, that I have not seen any India-rubber pessaries which were found to answer. From their slippery surface, they were always pushed out. The ingenuity of Dr. Moir's plan cannot be denied, particularly after the success he has obtained. I may be pardoned, however, for taking two objections to it. 1. Is it necessary to employ sponge-tents for so long a period as two or three weeks? From my own experience in the use of sponge-tents, except in a very few cases of stricture of the internal os, I should say it is very rarely that we cannot dilate a uterus to its full extent in a week. Indeed, Dr. Moir himself cautions us in this respect. Twice has their employment in his practice given rise to symptoms of pelvic cellulitis, and once to severe hæmorrhage, so that he has been compelled to suspend the treatment. I should, therefore, think it safer to use the sponge-tents for a shorter period, and the state of dilatation could be maintained longer with the gutta-percha pessaries, which, from their smooth surface, are not so irritating, and at least do not putrefy and become as offensive as the tent within the uterus. 2. The co-existence of endometritis is another objection, which has made Dr. Moir's plan almost nugatory in my hands. Practically speaking, very few, if any, women, whose sufferings from the displacement are severe, can bear the sponge-tents: after two or three days, I have been obliged to desist, and so time was lost, and I could not dilate the organ to a sufficient extent to do good.

In this dilemma, I have adopted the instrument I now show you, and I think with comparative good effect. It consists, you see, of a lower stem, in which wire spirally arranged, indeed an ordinary bell wire spring. This lies within the vagina. To the superior end is attached a smaller spiral spring, and well tempered. This lies within the uterus, continuous, however, with the larger spring in the vagina; the point of union being marked by a disk of gutta-percha, upon which the uterus rests. The whole wirework is covered by caoutchouc to preserve it from moisture, being closed permanently at the smaller and superior end, but at the larger or inferior end by a gutta-percha moveable stopper. The application of this pessary is easy. The sound properly bent, according to the amount of the version, having been introduced within the uterus and again withdrawn, a stilette which fits within the pessary is similarly bent. When passed within the pessary, this last takes the same shape, and is so readily introduced within the womb. The stilette is now withdrawn, the spring recoils, and the uterus is kept in its normal position. One important point in regard to the uterine portion of the pessary should be here noted. I never allow the end of it to touch the fundus, by making it at least half an inch shorter than the uterine cavity. From what I have told you of fundal endometritis, you will see the prudence of this course. From this last circumstance, and the fact that the stem is freely movable on all sides, so that the jerks to which the uterus would be exposed by sudden movements of the body are obviated, it certainly seems to be borne better. There is one objection to its use to be noted here, but which

can be obviated also by care. The projecting vulvar end has to be secured by a napkin or strings, and these sometimes chafe the external parts, especially with fat women. If the strings employed be of the circular caoutchouc, but little tenderness occurs.

Lastly, Dr. Evory Kennedy uses a sort of gutta-percha speculum, with a prolongation superiorly and inferiorly to project into the posterior vaginal *cul-de-sac*, which he informed me in several cases of retroversion he had observed to be very deep. The whole success of his instrument depends upon this contingency, the before-named prolongation supporting the womb in place when it has been reduced. The inferior vulvar portion is kept in place by a napkin. In one case where I saw it used, a cure resulted.

[To be continued.]

Illustrations

OF

HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

SOUTH DEVON AND EAST CORNWALL
HOSPITAL.

LOOSE CARTILAGES IN THE KNEE-JOINT.

By W. J. SQUARE, Esq., Surgeon to the Hospital.

IN October 1861, I published in the *London Medical Review* a short paper on Loose Cartilages in the Knee-joint, and their safe removal by subcutaneous incision.

Among the cases reported was that of William Davy. Since that time I have operated upon him again, and removed two loose cartilages from the same joint. I have now practised subcutaneous incision of the capsule of his right knee-joint five times, and inflammatory action has not followed either operation.

At the risk of exciting the remark that I am riding my hobby too hard, I am still anxious to bring this valuable case again before the profession, and in a more detailed and explicit form. That I do not overvalue the importance and safety of this operation may be inferred from some clinical remarks made upon it by Mr. Syme in No. 60 of the *BRITISH MEDICAL JOURNAL*. Speaking of the mode which I advise, he says: "When the safety and facility of this procedure are contrasted with the danger of excision, and the irksome confinement to bed of several weeks duration which is requisite for accomplishing the process of fixture, I think there can be no doubt that the profession are greatly indebted to Mr. Square for perfecting the subcutaneous operation, and rendering it available for all cases of the disease."

Wm. Davy, aged 24, a healthy farm-labourer, was admitted into the hospital on the 11th of May, 1860. His right knee-joint had been weaker than the left for several years. Fourteen weeks previously, while running with a wheelbarrow, he stepped on a stone, and wrenched the joint severely. He discovered the presence of a loose body in it nine weeks before admission. It caused much pain when he walked, and he was thereby compelled to give up his work. The cartilage was readily felt; when pressed, it glided with wonderful rapidity from one part of the joint to another. It was flat, and of about the size of a shelled almond.

OPERATION, May 11th, 1860. Subcutaneous incision was performed in the following way. The cartilage was first fixed by the fingers of an assistant at the lower and inner part of the joint, just above the edge of the articular cartilage of the tibia. I then introduced a strong

narrow tenotomy-knife, two inches and three-quarters long in the blade, through the skin, two inches below the cartilage, passed it subcutaneously as far as that body, directed the cutting edge vertically upon it, and freely divided the joint-capsule. I next swept the knife semicircularly in the subcutaneous cellular tissue, and thus made a tract for the reception of the cartilage, which I pressed out of the joint into it. I then slid the cartilage to the lower end of the subcutaneous tract, four inches from the joint, on the inner side of the tibia. A pad, being placed upon the puncture and subcutaneous tract, was bandaged firmly; and a long straight splint was secured behind the thigh and leg, to keep the knee extended and fixed. The limb was raised, and retained at an angle of 45°.

May 18th. The cartilage was excised.

May 25th. He was discharged cured. Neither pain, swelling, nor inflammatory action had occurred. He walked well.

Feb. 4th, 1861. Wm. Davy was again admitted into the hospital. For some weeks he had felt another and very small body in the same knee-joint.

Feb. 8th. I endeavoured to accomplish the usual subcutaneous operation; but failed to do so, in consequence of the small size and extreme mobility of the cartilage. He was treated in the usual manner, and no bad results ensued.

Feb. 22nd. The operation was repeated, and again without success; still, with the same treatment, there was perfect freedom from inflammation.

April 24th. He was readmitted. On the 26th, I again operated subcutaneously, but unsuccessfully. Treatment was applied as before.

May 2nd. He was allowed to walk about the ward. He had had no pain nor swelling since the operation.

March 26th, 1862. Wm. Davy was again received into the hospital. He had now two loose cartilages in the knee joint, having discovered the presence of the second and larger one about a fortnight ago.

March 28th. I operated in the ordinary manner, and lodged both cartilages in the cellular tissue, about three inches from the joint, on the inner side of the tibia. The usual treatment was observed.

April 4th. No pain or sign of inflammatory action had occurred, and to-day I removed both cartilages.

April 10th. He was discharged cured. No swelling of the joint existed, and he walked well.

It is not my intention to offer many remarks upon this case, as it illustrates so forcibly and unmistakably the importance and safety of the operation. As far as I have yet seen of the method, it appears to be void of danger; and I have either operated myself or assisted at the operation fifteen times.

It is true that failure has thrice occurred in the present instance; but this arose out of unusual circumstances—viz., the small size and extreme mobility of the foreign body; and these very failures have strikingly illustrated the safety of the subcutaneous method of opening a large and important joint.

A NOVEL MARRIAGE LICENCE. M. Giordano, professor of midwifery at the University at Turin, gave this year the lecture introductory to the business of the session, and alluded principally to deformities of the pelvis in relation to marriage. So impressed is the professor with the importance of a capacious pelvis in a married woman that he proposes the following regulation: "Every woman shall be required, before signing the marriage register, to produce a certificate respecting the proper conformation of her pelvis." Another summary measure touching pelvic organs has been proposed by M. Larghi, of Vercelli: as a preventive of puerperal fever, the lining membrane of the uterus should be well brushed with a solution of nitrate of silver. (*L'Union Medicale*.)