"nonsense" about the Lariboisière Hospital, of Paris; whilst in anything I have written on the present subject I have never even mentioned or alluded to the Lariboisière till now. But Mr. Holmes has described it in his report as one of the largest hospitals, and "*the model of the Pavilion system*"—very badly, however, because artificially, ventilated. In the year 1861 he and Dr. Bristowe show in their table that 19 limb amputations were performed in that hospital. Of these 19 patients, 4 recovered and 15 died; certainly an astounding mortality, the more so when we consider that no money was spared by the French Government in the erection of this magnificent palatial hospital, and that each of its 600 beds was calculated to have cost upwards of £600.

ON THE TREATMENT OF INTRAUTERINE POLYPI.*

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TILL Sir James Simpson suggested the use of sponge-tents for dilating the os and cervix, surgeons were often obliged to look on, quite helpless, while women bled to death from polypi in the cavity of the body of the uterus, where they lay with the os completely closed, and often apparently healthy, and, as Sir James has shown, "were generally considered to be beyond the pale of any certain means of detection, or any possible means of operative removal."

The sponge-tent, however, is liable to many objections. It becomes very fetid when it has been a few hours in the uterus; it requires repeated applications before the whole canal of the cervix can be dilated, and it dilates the os externum to an unnecessary degree before it can be got to act on the os internum so as to allow of the exploration of the uterine cavity. The retention of fetid discharges in contact with the inner surface of the uterus is not unattended with danger, but this can be obviated by the use of glycerine as suggested by Marion Sims, or by impregnating the tent with carbolic acid, or permanganate of potash, as more recently proposed by Drs. Ellis and Aveling; but the great objection to sponge-tents arises from the repeated and prolonged applications of them required to get at the cavity of the uterus, and the mode in which they dilate the os externum, far beyond what is necessary, before they act on the os internum. Sir James Simpson, in describing their use, says "the use of the tent for a day generally dilates the os uteri and cavity of the cervix sufficiently, and the employment of the sponge is accompanied with little or no feeling of uneasiness. When it is necessary to examine the state and conditions of the interior of the cavity of the body of the organ, the persevering use of a series of larger and larger tents, for several days, is usually requisite, and the dilatation of the os internum and body of the organ, sometimes but not always, causes a feeling of uneasiness and pain that may require the use of an opiate." Dr. Marion Sims has seen metritis follow the injudicious use of the sponge-tent, and is very specific in his directions to avoid this. He does not allow the first tent to remain in for more than six to eight hours, and "if the second tent fail to dilate the cervix sufficiently it is safer, he says, as a general rule, not to persevere further for a time, but to wait a few days and then resort to it again." In another place he says, "I never use them if I can possibly avoid it, and I never apply them without apologising to my patient for the very unpleasant effects they produce. He who gives us an efficient, pleasant, and cheap substitute for sponge-tents will confer a great boon on Surgery."

My own experience more than confirms all that Dr. Sims says as to the danger of repeated applications of the sponge-tents, for I lost a patient on one occasion from the inflammation set up by the action of the third tent, although it was removed at the onset of the symptoms, and before the os internum was dilated, or any attempt could be made to explore the cavity; and for this and other reasons I have latterly given up sponge and adopted sea-tangle, applied in a manner I shall now describe; and, I believe this substance, when used rightly, supplies the boon to surgery so much desired by Marion Sims, and forms "an efficient, pleasant, and cheap substitute for sponge-tents"; above all, efficient, and, I will add, safe.

When uterine hæmorrhage has been going on for any time, the tissues become relaxed and the os becomes more open than it is in the healthy state, consequently, a fine sea-tangle tent can be passed at once through the whole length of the canal of the cervix, and on to the fundus of the

uterus; and, by a little care, a number of fine tents can be packed into the uterus, alongside of one other, when a single tent, though not nearly so large as the bundle so formed, could not be passed at all; and on this fact is founded the mode of dilating the uterus that I adopt. I pack into the uterus, extending throughout the whole length of the cavity and projecting a little beyond it, a bundle of fine sea-tangle-tents, as numerous as I can get in, without using force or causing pain, and leave them there for twenty-four hours. By their expansion, they dilate the whole cavity in an equable manner to such a degree as to allow of the finger being passed up to the fundus as soon as they are removed. Thus the repeated applications, and the irregular dilatations of sponge-tents, are avoided; and, as sea-tangle does not become putrid and offensive, as sponge always does, this source of danger is also obviated. When the woman has never borne children and the os is abnormally small, it may be necessary to apply a small single tent in the first instance, so as to dilate the passage to get in a sufficient number for full dilatation; but of the very many cases in which I have now used this method, I have only met this condition once, and then a single tent of the size of a number five bougie, placed within the uterus for some hours, enabled me to proceed with the dilatation.

The exact mode of fixing the tents is this. The uterine cavity is first measured with the sound, and then a No. 5, or 6, sea-tangle bougie is cut into pieces a few lines longer than the cavity, and the pieces have their ends rounded off. The patient is now placed in the semi-prone position of Sims, the "duck-bill" speculum is introduced, and the anterior lip of the uterus is seized with a fine tenaculum. Having exposed to view and steadied the part in this manner, as many of the pieces of sea-tangle as can be got in, without using force, are packed into the uterus throughout its whole length. Five or six pieces of a No. 6 bougie will dilate the uterus quite sufficiently for the introduction of the finger; but if more can be got in, it will facilitate the subsequent removal of any polypi that may be found. The patient is now put to bed, and a morphia suppository given, which may be repeated, if pain supervene. At the end of twenty-four hours, the patient is again placed in the semi-prone position, and the pieces of sea-tangle are extracted, one after another, with a forceps; and, chloroform having been administered, the right index finger is introduced into the uterus, while the fundus is pressed down and steadied by an assistant, or by the left hand placed over the hypogastrium. If the uterus be high up, or much elongated, it will be better to lay hold of one of the lips with a strong firm vulsellum, and draw the whole organ down to the vulva, where it may be held by an assistant, than to use any excessive pressure over the hypogastrium. If a polypus be discovered, its condition, size, and attachments, must be ascertained by the finger, and then the necessary steps taken for its extraction.

For removing the tumour, I first seize it with a fine vulsellum, guided up to it with the finger. This instrument is then committed to an assistant, and a single wire *écraseur* is introduced into the uterus. The loop of the wire is first passed over the handle of the vulsellum, and the point of the *écraseur* is run up into the uterus along the vulsellum, which serves as a guide for it, till it reaches the neck of the tumour. The finger is now again passed into the uterus, and the point of the *écraseur* being ascertained to be resting against the neck of the tumour, the wire is pushed along the blades of the vulsellum till it is free of them, when the screw of the *écraseur* is worked while moderate tension is kept up on the vulsellum, and thus the wire falls into its place and quickly divides the neck of the tumour, which may now be removed along with the vulsellum holding it. If a good slice of the tumour be taken off, it will be sufficient to ensure its disintegration and removal, so that it is not necessary to spend time and run the risk of irritating the uterus in trying to encircle the tumour at its absolute point of attachment; but if the wire be not carried fairly beyond the vulsellum, it will break when tightened and it will be necessary to fit on a new one and adapt it more carefully to the tumour.

Proceeding in this way, I have removed a large number of intrauterine polypi, and always with safety and comparative ease. One of the cases I have thus operated on, presents features of such rare interest, that I think it desirable to detail it at length, as I believe there is no similar one on record. Twenty-nine simple fibrous polypi having been removed from the interior of the cavity of the body of the uterus at four different operations.

Glandular polypi of the cervix are generally gregarious; where one appears, there will commonly be more found on careful examination. The soft cellular polypus is also frequently accompanied by one or more of the same description, and the glandular may be found along with any of the other forms; but the fibrous polypus is almost always single. Dr. West states that it is rare to find more than one projecting at the same time into the cavity of the organ. This, he believes, is due to there not being room for more than one tumour at a time in the

* Read in the Midwifery Section before the Annual Meeting of the British Medical Association in Oxford, August 1868.

cavity of the womb; for, he says, it is not an uncommon thing, some months after the removal of one growth, to find another occupying the same position, producing the same symptoms, and requiring a recourse to the same operation. In the case I am now about to relate, we not only found repeated growths of the tumours, but numerous tumours in the uterus at the same time; and, in these respects, the case is, so far as I can learn, unique, no similar one having been recorded by any author with whose works I am acquainted.

The patient was an unmarried lady, about 36 years of age, who had been a governess, but had been reduced to poverty by ill-health, consequent on menorrhagia, from which she had suffered for fourteen years. During this time, she had been treated by several physicians, and in many hospitals; but, till she came under my care in the Coombe Hospital, and I insisted on being allowed to do so, no examination of the uterus had been made. When I examined it, I found it enlarged, so that the fundus could be felt above the pubes. It was somewhat irregular in its outline, and its cavity measured an inch longer than it ought to do; but the os and cervix were apparently quite healthy. She was blanched from the loss of blood; her extremities were oedematous; her breathing was short and panting; and her debility was extreme. On consultation with my hospital colleagues, Drs. Ringland and Sawyer, and with Dr. Beatty, who kindly saw the case with us, it was agreed to explore the cavity; and, for this purpose, six pieces of sea-tangle were introduced, on September 5th, 1867, in the manner just described. On the following day, the finger was passed into the cavity up to the fundus, with great ease; and, so well was the canal dilated, that we could even see one of the tumours lying above the os internum; three tumours, each as large as a pigeon's-egg, were found and removed with the *écraseur*. The patient was kept in bed for a week, but suffered no pain or inconvenience; and, at the expiration of ten days, left the hospital.

For a time, the menorrhagia ceased, and she improved in health; but the hæmorrhage gradually returned, and, in the month of March 1868, she applied to be re-admitted into the hospital. The uterus was enlarged even more than it had been before; and again we dilated it, and found a group of tumours filling it up. Dr. Beatty was good enough to lend his valuable assistance; and, with his help and that of my colleagues, I removed nine polypi, some of them large and pediculated, others as small as a pea and sessile.

She recovered from this operation quite as well as on the previous occasion; but, although every tumour that could be discovered was carefully removed, the uterus never resumed its normal size; it remained large, and could still be felt above the pubes. The next menstruation was, however, healthy, both as to the quantity and character of the discharge; but in April the hæmorrhage returned; and in May it was as bad as it had ever been, if not worse. The uterus was now greatly enlarged; it could be felt above the pubes as large as a man's shut hand, and the sound passed into its cavity nearly four inches. On May 16th, we again dilated the os, which was as small, and apparently healthy, as ever. We now removed eleven tumours; four of which were pediculated and grew from the fundus, and were nearly as large as any of those that had been previously removed; the others were smaller and were sessile.

After they were all removed, we painted over the whole surface of the uterus very freely with a saturated solution of the perchloride of iron in glycerine. For some days after the operation, there was fulness, with pain and tenderness, in the lower part of the abdomen; but these symptoms quickly yielded to the use of poultices, and injections of tepid water into the vagina; and, on the tenth day, the patient was able to be up and going about. The uterus, however, scarcely diminished in size. The os closed completely, and got into its normal state, as it did after the previous operations; but the body remained large, and prominent above the pubes. No menstrual or other discharge took place till June 29th, when it again occurred, and became hæmorrhagic in character and very profuse. Consequently, on July 10th, I again dilated the uterus, assisted, as before, by my hospital colleagues and Dr. Beatty, and by Drs. Churchill, McClintock, Atthill, and Collis, and I removed six tumours, one as large as a hazel-nut, the others smaller in size.

After their removal, I applied strong nitric acid freely over the whole of the inner surface of the uterus. I believe this is the first time strong nitric acid has been applied to the inner surface of the uterus. I used it at the suggestion of Dr. Ringland, to whom we are also indebted for its first use in affections of the os and cervix.

On the next day, the patient expressed herself as feeling less uncomfortable than after any of the previous operations; the pulse was 104; there was no tenderness of the abdomen; and the only complaint she made was of having a very offensive discharge from the vagina. I had ordered her a grain of opium every second hour after the operation; I now prolonged the interval to every fourth hour, and ordered the va-

gina to be syringed out, and a poultice to be applied over the hypogastrium. The following day, the pulse was down to 96, and there was neither fulness, pain, nor tenderness; and the day after, the pulse was down to 80. There was some purulent discharge from the vagina, but not offensive; and she wished to sit up, which, however, was not allowed, but the poulticing and opium were discontinued.

The uterus diminished much in size after this operation; it sunk down into the true pelvis, and could no longer be felt above the pubes. On August 1st, exactly three weeks after the operation, I made a careful examination. The os was closed; the cervix was in its normal condition; there was no discharge. Examined by the bi-manual method of Marion Sims, the fundus could be found, regular in its outline, but rather larger than natural; and, when measured with the sound, its cavity was found to be nearly an inch longer than it ought to be. The patient is still in the hospital, where we keep her, partly to watch the further progress of the case, but more particularly that she may have the benefit of carefully regulated and abundant nourishment. She is taking citrate of iron and quinine, and goes out to walk every day.

We have thus removed twenty-nine tumours from out of the cavity of the body of this uterus, at four operations, within a period of twelve months. The tumours, when examined with the microscope, were found to be simple fibrous tumours, composed chiefly of convoluted fibres. I have already said that I know of no record of a similar case. Dr. West, in his work on the *Diseases of Women*, describes a case of recurrent fibroid tumour, and refers to a similar one published by Mr. Hutchinson, and one published by Dr. Atlee, as probably of the same character; but the history of the patients, and the structure of the tumours, prove the cases to be quite different from that now under consideration.

P.S.—When this paper was read at the Oxford meeting of the Association, the patient was still in the hospital. While she remained there,

Fig. 1.

she menstruated quite healthily. She left on Oct. 9th, 1868, and, in a short time afterwards, undertook engagements as a visiting governess, which she has since continued to fulfil. On January 6th, 1869, she

called on me at my own house, and reported that her menstruation had continued quite healthy; that the periods, since she left the hospital, had lasted only four days each; and that she only required to use two napkins each day, notwithstanding that she had to walk a great deal, even during the period, in attending to her pupils. She said she felt strong and well, and "had got a blush in her cheek"—all of which her appearance confirmed.

case; but seven of the polypi are shown, the others having been attached to the anterior wall, which is here supposed to have been cut away. The uterus and polypi are shown of the actual size, and six pieces of sea-tangle are shown traversing the whole length of the cavity, and projecting some distance beyond the os, as they should be, when first introduced, to effect dilatation.

Fig. 2 is also a diagram; it shows an uterus in which there was a

Fig. 2.

The accompanying illustrations are two of a series prepared for a paper I hope to publish in the *Dublin Quarterly Journal of Medical Science* on February 1st, in which I propose to discuss the whole subject of the diagnosis and treatment of uterine polypi, and are introduced here by the kind permission of the editor of that journal.

No. 1 is a diagrammatic view of the condition of the uterus, as ascertained by the finger to exist at the third operation, in the foregoing

single polypus, and exhibits very clearly the remaining steps of the operation. The uterus has been seized by a large, strong vulsellum, and brought down to the vulva. The instrument used for this purpose is large and firm, and with its blades made so that they will not compress the lip of the uterus. A smaller and finer vulsellum is fixed in the polypus; and the *écraseur* is shown about to be pressed up to the root of the polypus, as already described.