Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

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LECTURE II (*continued*).

ON SOME POINTS HAVING REFERENCE TO THE DIFFERENTIAL DIAGNOSIS OF FIBROUS TUMOURS OF THE UTERUS.

3. *Menorrhagia* is one of the commonest symptoms of fibrous tumour of the uterus. It is often so excessive as to amount to a draining away of the patient's life, and always most alarming to the patient. The quantity of blood lost may exceed that of a miscarriage. The menstrual periods are sometimes much prolonged, extending to ten or fifteen days—sometimes with scarcely two or three days' intermission, dark clots being numerous. Sometimes they are continuous, and without intermission. The aspect of the patient in such cases is completely anæmic; and in dark subjects a yellow tint is superadded, which has often been mistaken for an indication of cancer.

As to the evidences of disease, which the kind and quantity of hæmorrhage affords, they are not very precise. French pathologists assert that, even with polypi, and not rarely so in old persons affected with fibrous tumour, hæmorrhage may be altogether absent. M. Lebert (*Bullet. Soc. Anatomique*, xxv, 366) has asserted that mucous polypi the more frequently only produce a kind of imperceptible oozing of blood, which increases with effort and exertion. Fibrous tumours, on the contrary, occasion much heavier losses of blood. M. Barth thinks age has a great deal to do with it. At the Salpêtrière, fibrous tumours are frequently found in the old women's uteri, without losses of blood. Cruveilhier states that subperitoneal fibroids do not give rise to hæmorrhage. Those projecting into the cavity of the uterus do; and all efforts of expulsion aggravate this result. A recent writer, Dr. McClintock, seems to think this difference inexplicable. So far, however, as his statement goes, out of 25 cases which occurred to him, 14 had menorrhagia, and in 11 it was absent. In 5 of these last, the tumours were distinctly ascertained to be subperitoneal or interstitial. In submucous fibrous tumours, the hæmorrhage was common.

From an analysis of 61 cases in which the locality of the fibroid was described, I obtained the following results. In 13 cases, the existence of menorrhagia was either not stated, or not known. In the remaining 48, it was as follows.

Cases with menorrhagia, 34; viz.: Interstitial, 1; intramural, 5; submucous, 4; intrauterine, 10; in the anterior wall, 5 (one projecting into the uterine cavity); in the posterior wall, 1 (projecting into uterine cavity); extrauterine, 1.

Cases without menorrhagia, 14; viz.: Interstitial, 1; intramural, 1 (this patient had never menstruated,

and the Fallopian tubes were found closed after death); in the anterior wall, 4 (one had closed os, another had ceased to menstruate for two years previously; in the posterior wall, 2 (one had a tumour projecting into the uterine cavity, but the internal os was closed); extrauterine, 5; several all over, but pregnant, 1.

So far as these facts go, they tend to verify the assertion made by Cruveilhier. Probably this is much more generally true than even my tables affirm. A tumour in the anterior or the posterior wall may or may not project into the uterine cavity, especially at a catamenial period; and yet, owing to the closure of the external os, this may not be detected during life. It is, therefore, only in cases that have died that this point can be accurately determined; and even here there may be a source of error, except in unusually marked cases, from the contraction of the vessels after death. Then, again, we may have small polypi of the mucous variety within the uterine cavity, where the uterine fibroid also present does not project into its cavity; and so the result is vitiated. I think, therefore, that, *cæteris paribus*, the result generally obtained is less exceptional than it appears.

a. The cause of this hæmorrhage has been differently explained. Dr. Atlee believes it to originate not from the uterus itself, but from the vessels of the membrane which covers the fibrous tumour. He believes that this view is confirmed by the results of treatment; because if, during hæmorrhage, the bistoury be passed up and very free incision be made into the most exposed portions of the tumour, a small gush of blood will follow, and the bleeding will soon cease. The cut ends of the vessels retract, and the blood soon coagulates in their mouths. Thus the veins of the investing membrane, according to his view, become at times greatly engorged, in consequence of their circulation being impeded by the muscular action of the uterus; while the arteries, by reason of their more resisting coats, continue to supply them with blood. The point of least resistance must consequently be at the os uteri, as all the other parts are compressed by the contracting uterus. The veins on the surface are thus distended. The mucous membrane is delicate, and offers but little resistance to the rupture of the vessels.

b. But, on the other hand, it has been satisfactorily shown by Dr. Simpson, Messrs. Brown and Nélaton, and Dr. McClintock, and the practice of a host of other surgeons proves it daily, that the mere opening of the os in a case of menorrhagia from a contained fibroid arrests the hæmorrhage. Mr. Brown's explanation is, that the division of the os and cervix uteri permits the fibres of the body of the uterus to contract upon the contained tumour, and thereby to compress the vessels and prevent hæmorrhage. Thus Dr. Atlee and Mr. Brown are at issue. It is the uterine contraction which, according to Dr. Atlee, produces, and which, according to Mr. Brown, arrests the hæmorrhage.

And here, I think, one important point has been lost sight of in this question. According as the tumour is situated lower down in the cervix or high up in the uterine cavity, so a different effect may result. The same difference of position may explain the altered action of ergot in different cases. Sometimes it completely arrests the hæmorrhage; sometimes not only does it fail in this respect, but it seems rather to increase it. Contraction of the fibres of

the uterine neck causes the cervix and os to dilate, and thus to enlarge its cavity. Contraction of the fibres of the body and fundus of the uterus tends to propel a contained body outwards, to diminish the uterine cavity, and dilate the cervical cavity. It is the same principle at work as is inculcated by Dr. Barnes in cases of placenta prævia; and as, in these, artificial separation of the placenta is found (if the attachment of the placenta do not extend too high) to arrest hæmorrhage, so it explains a fact commonly observed with fibrous tumours adherent at this point, that, if much manipulated, they bleed less subsequently, owing to a similar partial detachment. The reverse is the case with tumours situated within the cavity; and the following case, brought before the notice of the Edinburgh Medico-Chirurgical Society, on the 18th November last, by Dr. Matthews Duncan, is an example in point.

"Dr. Matthews Duncan showed a fibrous tumour, globular, about three inches in diameter, occupying the fundus uteri, and as if pressing on the enlarged uterine cavity. The uterus lay high in the pelvis, or rather elevated into the abdomen; and the cervix was slightly hypertrophied. The hypertrophy of the proper uterine tissue around the tumour was great, and the uterine sinuses enormous, as in pregnancy. Dr. Matthews Duncan was called to see the patient on the day of her death. She was anæmic, but fat and puffy, suffering from dyspnoea, and evidently dying; but her pulse was firm, and respiration clear all over the chest. She died in a few hours. She had suffered long from excessive monthly hæmorrhages. Examined after death by Dr. Matthews Duncan and Dr. Grainger Stewart, the tumour, as it projected into the uterine cavity, was covered by a layer of muscular and uterine tissue and a healthy layer of mucous membrane. But about the centre of the projection a little clot was observed, decolorised at its extremity. (No hæmorrhage had taken place some days before death.) This clot projected through a round opening as large as the transverse section of a large crowquill. This opening communicated with the elephantine reticulations of various sinuses, with hypertrophied uterine tissue surrounding the tumour proper."

The opinion of Dr. Matthews Duncan was, that in most cases of menorrhagia, many would, on minute investigation, be found to result from a similar condition of uterine sinuses, or of the same vessels in the uterine mucous membrane.

I think, therefore, that it is more philosophical to admit the truth to lie between the opinions of Dr. Atlee and Mr. Brown. There can be no doubt that some of these tumours become larger during a menstrual period, and subside again to their normal size when this has abated; so polypi, which cannot be felt during an interval through the os, during a period often protrude below it, and can be readily detected by the touch, and seen through a speculum. This denotes that congestion of the tumour has occurred. During gestation, also, fibrous tumours will partake of all the enlargement of the uterine organ. Such a case is recorded by Dr. Priestley (*Pathological Transactions*, vol. i.)

This patient, before conception, had several vesicular polypi, which were removed. A small nodule at this time was, however, noticed in the posterior wall. After delivery, in consequence of hæmorrhage, Dr. Priestley removed a fibroid situated at this part, about four inches in breadth by one in length. This tumour was probably the nodule, which had enlarged

during gestation; and this view was confirmed by the great similitude of its structure to the walls of the gravid uterus.

And there are several cases illustrative of this same view. There is, then, hypertrophy and congestion of the tumour. This in itself is a cause of hæmorrhage from the polypus itself.

We observe the same cause and effect in the uterine lining. We all know how commonly, in cases of menorrhagia, an enlarged congested uterus is all that explains it, from whatever primary cause induced. Rokitansky has laid down the proposition, that the nearer the fibroid growths approach the uterus, and thus maintain the mucous membrane in a state of inflammation or irritation, the more palpable is the hypertrophy of the uterus. Here, therefore, is the reason why the uterine mucous membrane, as in simple hypertrophy and congestion of the organ, should give rise to menorrhagia.

The following case, however, which occurred to myself, is interesting, as I think it affords a solution of the question.

Some months ago, a lady called upon me, suffering from menorrhagia. I found a heart-shaped polypus just within the vulva, of about the size of a plover's egg, attached by a long narrow pedicle to the os uteri. I learnt that some months back the growth was much larger, and had projected more out of the vulva. It had been accidentally injured, and there had been much hæmorrhage from it. Since then it had been smaller, and the hæmorrhage less; so far explaining how, if the polypus be wounded, the hæmorrhage will be lessened, after the first gush, for a time. I removed the polypus. I found, however, the cervix intensely congested in its immediate neighbourhood; so much so that an accidental slip of the scissors gave rise to so much hæmorrhage, that I was obliged to use the actual cautery to arrest it.

The hæmorrhage after ligation of a polypus has frequently been noticed by writers to arise from neighbouring parts, and is, in my opinion, in the main due to the mucous membrane of the uterus (already very much more vascular than normal) being irritated by the foreign body. In this way, retention even of a small portion of adherent placenta, after the recovery of the patient, will produce menorrhagia. The way, therefore, in which the incision acts is chiefly by removing the pressure against the uterine mucous surface, and so diminishing the irritation.

[To be continued.]

A NEW MEDICAL PERIODICAL has lately appeared in New York, called the *New York Medical Independent*, a strictly professional but entirely independent weekly journal, to be issued every Wednesday morning, printed with clear type, on good paper, octavo, sixteen pages, at the low price of two dollars per year, payable in advance (fifty cents additional per year, for postage for city and Canada subscribers). The objects of the *Independent* are to elevate the medical profession, by advocating improvements and reforms wherever practicable; to stimulate a purely American literature; to unmask abuses and quackery of all kinds; to urge a higher standard of medical education; faithfully to chronicle discoveries, advancements, and progressions made in every branch of medicine and surgery; to discuss topics of interest to the profession, and generally to be a true, faithful, and independent representative in periodical literature of the American medical profession.