

tensive and obstinate diphtherite of the mouth and pharynx, an indication, perhaps, of the blood crasis which determined this peculiar form of pneumonia.

Circumstances have hitherto prevented my making any observations on contraction of the side from diminished volume of the lung subsequent to recovery. I have no doubt, however, of its occurrence in all cases in which lymph is effused into the parenchyma and areolar tissue of the lung; and I believe that such examples as those to which I have referred would, if uninfluenced by treatment, terminate either in abscess, or in that form of disease attended with contraction which has been described by different writers under the term chronic pneumonia; among others, by Dr. Cotton, in two papers in the *London Medical Times and Gazette*, March 31, and April 14, 1855.

ART. XIII.—*Practical Observations on Polypus Uteri.* By ROBERT JOHNS, A. B., M. B. T. C. D., L. & F. R. C. S. I., Member of the Council of the Surgical Society of Ireland; late Consulting Accoucheur to St. Peter's Parochial Dispensary; Ex-Assistant Master to the Lying-in-Hospital, Dublin; Vice-President of the Obstetrical Society of Ireland; Chairman of the Midwifery Court of Examiners of the Royal College of Surgeons in Ireland; Consulting Accoucheur to the Anglesey Lying-in Hospital, &c. &c.

As there are few symptoms which create so much alarm and anxiety in the mind of the female as uterine hemorrhage, so is there none on which it is more important to possess a correct understanding. Whether the object of the physician may be to calm down those apprehensions, on the one hand, where there are little grounds for entertaining them, or, on the other, to prepare the poor sufferer or her friends for the dread change that may await her: in either case the object can only be attained by him who is perfect master of the subject, and fully acquainted with all the circumstances that might possibly influence its progress and termination. Such information, however, is not quickly or easily acquired, and, therefore, it becomes a duty to communicate to our professional brethren any unusual or anomalous occurrence that might possibly bear any practical relation to the subject, or assist in the establishment of a correct and truthful diagnosis. Such a case I think I had an opportunity of witnessing some time since, and deeming that its perusal might not only be interesting to the profes-

sion, but possibly useful to some of its junior members, I feel little hesitation in publishing an account of it.

Mrs. M., aged 36, of a scrofulous diathesis, some years married, but without a family, was admitted into the Lying-in Hospital on the 31st of May, 1843, having been pronounced by a medical man whom she had consulted to be pregnant, and about to abort. She was very much weakened and blanched from loss of blood, and the countenance had an appearance of malignant disease.

As the hemorrhage still continued very much, a vaginal examination was instituted; but nothing abnormal was discoverable, neither ovum, tumour, ulceration, nor congestion, the uterus was not sensibly enlarged, nor did it appear to contain any foreign body; but its os was very patulous. By means of cathartics, acids, and astringent medicines, together with applications of vinegar and cold water to the vulva, the discharge was arrested; and she left the hospital, relieved, on the 16th of June.

On the 1st of August following she was again received into the institution, in consequence of the hemorrhage having returned in a very severe form. She was then again carefully examined per vaginam, but, as on the former occasion, no cause could be assigned for her symptoms, and she was believed not to be pregnant. About a week after, on making my ordinary evening visit to the ward (no permanent amendment having taken place in her case, in which, from its obscurity, I was much interested), I again practised the toucher, when, much to my surprise and equally to my satisfaction, I found a polypus protruding through the os uteri, having its insertion rather high into the cervix, and at its left side. On the following morning Dr. Johnson (then Master of the hospital), in consequence of my report of the previous night, examined her, but neither he nor I could, at that visit, discover any tumour, nor any disease whatever; the os uteri was perfectly closed. Matters remained in this doubtful condition for about another week, when Dr. Johnson found the polypus in the position as described by me on the former occasion. The presence of the tumour in the uterus being no longer a matter of uncertainty, arrangements were made to throw a ligature around its pedicle on the next day, the bowels having been previously well freed. However, when the time for operation had arrived, it was ascertained that the polypus had disappeared, and the os uteri contracted as before. At first it was supposed that the tumour, which was not to be felt through the walls of the uterus, had been detached, and had passed from the vagina during the action of

the bowels. This idea was very soon dismissed from our minds, in consequence of the same phenomenon having occurred the week previously. She was then ordered to have ergot of rye, which had not any effect, beyond checking the hemorrhage. I then sent her out to drive on an outside car, for a couple of hours, on two consecutive days, over a rough shingly road, with a view of bringing down the polypus again into the vagina, which event took place on the second day; but whether "*post hoc vel propter hoc*" I shall not venture to say. Immediately on her return from driving we set about deligating the diseased growth; to accomplish which, an assistant made traction with a forceps on its base, it having been found impossible to operate otherwise, as the tumour was felt to be receding quickly into the uterus. It came away with the canula on the fifth day after operation, and was about the size of a billiard ball. This occurred in the second week of September, and Mrs. M. left the hospital on the 3rd of October, but, strange to say, not much improved by the operation,—a very unusual issue after the removal of such bodies, for generally the re-establishment of health is most marked. This fact, in conjunction with the persistence of her former symptoms, and her malignant aspect, before alluded to, led Dr. Johnson to fear very much (as he stated to me) that some malignant disease coexisted with the polypus.

As about this time I left the institution, my official connexion with it having ceased, I lost sight of this female until the 5th of February, 1844, when she visited me at my own house, and told me that, as she was as bad as ever, she had come to consult me, and that she had taken lodgings in town to be under my care. Her symptoms then were as follows:—Bowels confined; health rapidly declining; loss of flesh, appetite, and strength; catamenia profuse, and occurring every three weeks; great hemorrhage at other times, occasionally passing pear-shaped clots, and some long and stringy, a watery discharge with an admixture of whites succeeding to the bloody flux. From her then accounts of herself, and her past history, I had no doubt as to the nature of her case, which a vaginal exploration confirmed. I found the os uteri soft and patulous to about the size of a shilling, and a polypus slightly protruding through it, and growing very nearly from the same part of the uterus as the former one had its origin, viz., the cervix, but with this difference, that it sprang from the opposite side (the right); her pulse was quiet, but weak; and the rectum was loaded with scybalæ. I ordered her some cathartic medicine,

and after its operation a drachm of Bewley's solution of ergot of rye three times a day.

February 7th. The polypus not to be felt; it had receded into the uterus as its companion had done before, and the os uteri had contracted over it, not permitting anything to be passed through without much force. Bowels more natural; hemorrhage less; the solution of ergot of rye was repeated.

9th. Health much improved, but as I believed the polypus to be still in the womb, I ordered ten grains of ergot of rye and two grains of camphor infused in hot water, three times a day, until bearing-down pains, or a gush of water (which last symptom, I collected from her, was always a precursor of the descent of the tumour), should occur—when she had directions to send for me, that deligation might be at once performed, as, from my former experience of her case, I knew that at that stage no time was to be lost.

14th. Confined to bed from influenza (to which disease, when epidemic, patients suffering from uterine complaints are very liable, as I have before stated elsewhere); all medicines previously ordered to be omitted until the intercurrent affection had disappeared.

19th. She had resumed former treatment.

20th. I visited Mrs. M. in consequence of a hurried message, the precursory symptoms having occurred. At 3 o'clock P. M. on that day, with Gooch's double canula, I passed a ligature as high as I could around the pedicle of the tumour (it having descended into the vagina), and then gave her an anodyne draught.

23rd. Bowels confined; to have an enema; polypus not to be felt, as it had again mounted into the uterus, carrying the canula up with it for about one inch and a half or two inches, the os being firmly contracted on it. As she had not any bad symptom, I did not interfere beyond tightening the ligature, and syringing out the vagina, both of which were done daily from the operation until the 24th of February, on which day, at 3 o'clock P. M. the canula and polypus (about the size of a pullet's egg) came away on merely touching the former. Mrs. M. progressed favourably for about twelve hours, when rather smart hemorrhage set in, and as on February 26th it had not yielded to the ordinary mild measures, I had a blister applied to the sacrum, and ordered fifteen drops of the solution of the permittate of iron three times a day, which had the desired effect: this treatment I have frequently known to arrest violent uterine hemorrhage, even that from cancer.

From this time she rapidly recovered, and she has enjoyed excellent health ever since, having grown immensely fat, and regained her natural colour and strength.

The points of interest in this case to which I would direct attention, on account of their comparative infrequency, are:—

1. The co-existence of two fibrous polypi in the uterus, both being of a large size.

2. The occasional ascent of both the tumours into the cavity of the womb, so as not to be felt, after a great portion of them had been protruded through its mouth, which was firmly contracted over them.

3. No similar case having been at that time recorded, led to the belief of a spontaneous cure.

4. No increase of size or weight in the uterus, and the absence of all the usual symptoms of the disease except hemorrhage in the first instance; whereas, in the second, they were well-marked, and at once pointed out the nature of the case.

5. The malignant aspect of the patient.

6. The recession of the tumour together with the canula.

7. Hemorrhage recurring after the removal of the second polypus.

1. Dr. F. H. Ramsbotham mentions, as an extraordinary feature, the fact of two polypi having coexisted in the womb of a patient of his, but both were of a *small size*. That, in the case now under consideration, both tumours coexisted, and that the one was not a repullulation of the other is, I think, evident from the fact of the site of each having been different; and from the improbability of the second having gained such a size from the time of the removal of the first, until its discovery, and the non-recovery of the female after the removal of the first.

2. Dr. Ramsbotham has published in the *Medical Times* for November, 1852, two cases, in which a polypus had receded into the womb, after it had been felt through the os; in one the tumour was very small; but in neither is the insertion into the womb mentioned.

Dupuytren gives a case where a polypus ascended into the womb and descended into the vagina alternately; but, as in Dr. Ramsbotham's case, its origin is not stated; still I conceive it may be inferred from the following extract from his "*Leçons Orales*," that it grew from the fundus of the uterus:—"It is conceivable to those who know the manner in which bodies growing from the fundus uteri descend into the vagina; for they know that they draw down the fundus with them, even

to cause more or less inversion, and that, after the section of the pedicle, the uterus rises, so that they can no longer feel the point of insertion."

This explanation will not hold good here, as in this case, as has been already shown, neither of the polypi had its origin from the fundus, nor near it. This phenomenon in Mrs. M.'s case had not any connexion with the catamenia. There is, however, as far as I know, no case recorded in which there was a plurality of polypi, and where each ascended and descended as just described.

3. During Mrs. M.'s sojourn in the institution, there lay in the same ward with her a female who had a polypus in the womb, but as it was about to be removed by ligature, it was found detached and lying in the vagina. There are many such cases on record; but authors are not agreed as to the cause of this spontaneous cure. Some attribute it to gangrene,—a very rare cause. Dupuytren in his long practice met but one case. Others, as Levret, say, "that the pedicle of the tumour is strongly compressed by the cervix uteri, as by a ligature;" not probable in this case, as the os was very patulous, and the parts were much relaxed. Others still, as Dupuytren, "that the pedicle is torn by rough handling from too many examinations." He also says:—"There are uterine polypi of a fibrous nature, which are detached spontaneously without the pedicle being softened by gangrene, such as are developed almost immediately beneath the internal membrane of the uterus; hardly have they escaped the cervix, when, their external covering being very thin, they easily break and fall of themselves." Madame Boivin relates some such. Dr. Safford Lee also speaks of them, and thus explains the phenomenon:—"Their neck only contains cellular tissue; it is possible, by some great mental excitement, that the uterine tissue in the first instance, may be made suddenly and powerfully to contract upon itself, and detach the slight connexion between it and the tumour, by drawing up the tissue composing its pedicle into itself; whilst the cellular pedicle may become gradually absorbed, and the tumour detached by the action of the uterus." The last two causes, I think, most likely co-operated in Mrs. M.'s case.

4. The symptoms are not always commensurate with the amount of the disease, as we see in this case that when both tumours were in the uterus there were no positive indications of the disease, whereas, where but one remained, the symptoms became well-marked. Dr. J. H. Ramsbotham has published a case in which the symptoms ran very high, although the polypus was only the size of a hazel-nut.

5. This unhealthy appearance of the face was removed on the ablation of the second polypus.

6. This fact proves how the uterus can sometimes bear with impunity the presence of a foreign body of such a nature.

7. It is very unusual for hemorrhage to occur where the ligature is employed, for which reason it is preferred by many to the knife.

It may not be out of place here to allude to that "*vexata quæstio*," whence the source of hemorrhage in polypoid disease?

Dupuytren gives no decided opinion on the subject, but says:—"Fibro-cellular polypi are composed of arteries and veins; the former have not a size proportionate to that of the polypus; they are sometimes very large, but nevertheless furnish very rarely blood; they are always placed in the centre of the pedicle, and this disposition explains a very remarkable phenomenon, which is, that the ligature rarely stops the circulation of the blood in the central arteries." In his work, already cited, he speaks of cases in which pulsations were felt in the pedicle, as does also Vacoussin. Saviard states,—"*That two very small arteries, and two veins as large as the crural were present in a hollow polypus, whose cavity was full of blood.*"

Cruveilhier has recorded a case, in which "*several great uterine sinuses opened on the surface of the tumour at its apex, from which the blood flowed, which destroyed the patient.*"

Dr. Lee had a case in which, when pressure "*was made on the tumour, blood flowed out from numerous small orifices on its surface.*"

Dr. Oldham says:—"The bleedings in polypi are from the tumours themselves, and principally from the veins on their surface or pedicle; that sometimes the veins are lacerated, and at others open under the accumulation of blood in them, as they do during menstruation."

Levret "*found an artery penetrating into the thickness of the tumour.*"

Lisfranc "*has seen enlarged veins in the pedicle of the fibrous body.*"

Dr. Gooch says,—"*that it comes from the surface of the excrescence, and not the lining membrane of the uterus.*"

Dr. Burns "*believes that the vessels are chiefly confined to the surface, but they, especially the veins, are sometimes considerable, and give a mottled appearance to the surface, and are a source of hemorrhage; at the same time, it is to be remem-*

bered, that the blood often comes from the surface of the uterus itself."

Dr. Safford Lee says,—“that the hemorrhage arising in these cases may be attributed to the very vascular state of the mucous membrane at the insertion of the polypus with the uterus; that the veins of the part are the principal sources of bleeding; and where the mucous membrane is abraded, the vascular network which envelopes these growths may add materially to the result; even where the mucous membrane is uninjured, this envelope may materially increase its vascularity.”

For the following reasons I am strongly inclined to believe, that in the generality of cases of polypi the hemorrhage does not come from the tumour, but that it is furnished by the lining membrane of the uterus in a state of congestion, especially at the insertion of the growth into that organ; and that such condition is extended to the investing membrane of the tumour, which may also add to the supply.

1. Hemorrhage is a common accompaniment to fibrous tumours of the uterus, when it is not possible that it could come from them.

2. In simple congestion of the uterus, hemorrhage often occurs.

3. When polypi are removed by excision, hemorrhage rarely, if ever, occurs.

4. In this disease the menstrual secretion is not infrequently increased, even to amount, in some cases, to hemorrhage.

5. Congestion of the uterus evidently exists where these tumours complicate pregnancy.

6. Mucous, or other polypi, not larger than a currant, frequently cause alarming hemorrhage, whereas those of large size are not unusually unaccompanied by this symptom. I published a case in the Dublin Medical Press for April, 1851, in which not the smallest quantity of blood was ever lost, although the polypus was large, highly vascular, of a dark purplish colour, of a venous character, and of the channelled species which is said to bleed on pressure.

7. In Miss D.'s case, now alluded to, she complained very much of a serous discharge, which on examination was found issuing from the uterus in vast quantity, whilst the excrescence was perfectly dry and free from the discharge, and evidently not secreting it.

There is sometimes a complication met with in cases of polypi, which I conceive is very likely to be another source of hemorrhage; for we frequently see it produce this symptom when it exists independent of this disease; and it not

unusually keeps up the shedding after abortion, and in some instances reproduces it after it has ceased for a time,—I mean ulceration of the cervix uteri, first pointed out as a not infrequent concomitant to this affection by Dr. Henry Bennett, in the *Lancet* for July, 1845.

This case illustrates very forcibly the difficulty we frequently have in diagnosing polypi of the uterus, and strongly points out how it behoves us to be very cautious in giving an opinion in doubtful cases, of which it is evident the French Professor, Dupuytren, was aware, from the following quotation from his work:—"When fibrous tumours are completely shut up in the womb, whose cervix is not at all dilated, the rational symptoms furnish only conjectures, and the touch and sight are insufficient." The fact of Mrs. M. having been treated as if about to abort, bears out these views. Indeed, every practical accoucheur must be forcibly impressed with the truth of this assertion.

Although the case now under consideration terminated so successfully, I think that were I to meet again a similar one, I should somewhat modify my treatment; as thus, I should dilate the os uteri so as to explore that organ, and to bring down the polypus, if there, into the vagina, I should then excise, having previously deligated it. This latter combined treatment I pursued in the case of Miss D., already quoted, and which has long since been recommended by Dupuytren in certain cases of polypoid disease; and has also been advised and carried out by me in amputation of the cervix uteri.

Many means of dilating the os uteri in cases of disease have been from time to time suggested, amongst which we find the following: tents of gentian root, of compressed sponge, and lately of elm bark, the latter so highly vaunted by Dr. Storer, of Boston, and Mr. M'Donnell, of Virginia. Screw dilators, made of box-wood, have been recommended by Mr. Ausandon. Dupuytren prefers incision of the os, followed by ergot of rye, to the use of sponge; and he thus speaks of the latter:—"Such manœuvres have ended in the development of intense metro-peritonitis." He also says, if ergot of rye be given before this operation, it may produce rupture of the womb. I, for my part, think such an accident far more likely to follow on his treatment. I, however, have never adopted it, but I have used both the sponge tents and the dilators of Ausandon with success, and without any of the evil effects spoken of by that celebrated surgeon ensuing.