ought to be attended to. This ought to be ascertained in any case so complicated, during that part of labour which is entrusted to the natural powers, because the sudden death of the mother from rupture of the uterus, as in Case 1, or from sudden and rapid exhaustion, may require the abdomen and uterus to be opened to save the child. A want of preparation, and an uncertainty as to the life of the child, may just let the moment slip by in which the child might be preserved.

The moderate inhalation of chloroform, in cases of this kind, would be most desirable; but the friends of the patient ought to be clearly apprised of the chance of sudden death from the disease itself, so that, should it happen, it may not be ascribed to the chloroform.

13, Devonshire Square, Bishopsgate Street, February 1851.

CASE OF LABOUR COMPLICATED WITH CAULIFLOWER EXCRESCENCE OF THE UTERUS: WITH REMARKS ON THAT DISEASE.

By JOHN ROSE CORMACK, M.D., F.R.S.E., etc.

(Read before the Medical Society of London, Nov. 30, 1850.)

THE case which I am about to bring under the notice of the Society is instructive, when viewed in connexion with other recorded cases of the same disease. It calls attention to the use of certain *palliative medicines*; and it likewise brings under our notice *excision* as a means of cure, or of prolonging life when the malady cannot be extirpated. It is also a remarkable case, from the circumstance of both the patient and her husband having been ignorant of the existence of disease, till I discovered it when called in at the end of the natural term of gestation.

During September 1847, I was requested by Mrs. G., aged 30, married for five years, and the mother of one child, to attend her in her approaching confinement, which she said she expected about the end of November. She had had two miscarriages. She said that her general health was good, and that since the third month of her pregnancy she had enjoyed better health than since the birth of her child. Some months before she became in the family way, she had suffered greatly from menorrhagia; and being then in Edinburgh, she went to consult Dr. Simpson. He was not at home, but she saw his assistant, who prescribed, and requested her to return on a future day to see the Professor. Finding great benefit from the medicine ordered (which, I believe, was gallic acid), she did not go back; and had never since asked, nor, as she supposed, required medical advice. She said, that about once a month she had had, during her pregnancy, a slight coloured discharge for a day or two, and also some colourless discharge; but that as this had been the case during her first pregnancy, and as it did not seem to weaken her, she was not uneasy about it.

From the day in September when she asked me to attend her in her confinement, till I was actually called to her in labour on the 28th of November, she never made the slightest complaint to me,

though I saw her frequently. During that period, she took much exercise; and she did so, not only with impunity, but with advantage to her general health.

About 5 P.M. on the 28th of November, I was summoned to attend immediately upon Mrs. G., who, I was informed, was then in labour. Upon my arrival, in half an hour afterwards, at her bedside, I found that she was not in pain; and, according to her own statement, and that of the nurse, she had hardly experienced any symptoms which resembled approaching parturition, except that she had discharged, *per vaginam*, a watery fluid in such abundance as to soak through the bed. I was told that the membranes had been ruptured, and that the waters were still coming in large gushes. As I entered, the discharge was observed for the first time to have given a sanguineous stain to the linen: and on proceeding to make an examination, I found her bathed in blood. She suddenly became very faint; and from the blanching of the countenance and the ebbing pulse, it was evident that the discharge from the vagina was telling rapidly and dangerously upon the vital powers. Upon introducing the finger, I felt—surrounded by soft and imperfect clots—an irregular, tolerably firm, and somewhat elastic mass, obstructing the upper part of the vagina. From the sensation which this mass communicated, and from the alarming way in which blood was flowing, I at first suspected that I had to deal with a case of placenta prævia. A moment, however, sufficed to remove this erroneous impression; for I found that I was easily able to carry my finger round the base of the tumour, and to make out that it did not proceed from the interior of the uterus, but was attached around its orifice, externally, and chiefly to the anterior lip. At this time, the os uteri was just sufficiently patulous to admit the point of the fore finger.

My first proceeding was to inject a strong solution of alum into the vagina; taking care that it reached and thoroughly bathed the os and cervix uteri. I next introduced a compress saturated with the same lotion, and then firmly plugged the vagina. I also had an opiate enema administered by the rectum. She soon fell asleep, and in two hours awoke refreshed, though very weak. During this time, I learned from the husband that the colourless discharge which she had before spoken of to me was watery and limpid, and not like mucus. This was afterwards confirmed by herself; and before leaving the house, I announced to both parties the nature of the case:—that there was a growth from the uterus, from which the water and blood had poured; that the membranes were still unruptured; and that labour had hardly commenced.

At six in the morning of the 29th, I was sent for in consequence of the pains having become sharp and regular. There had been no more loss of blood, and the pulse and general condition of the patient had so much improved, that I resolved to withdraw the plug (which was causing much discomfort), and satisfy myself as to the state of matters by making a digital examination.

The plug was found to be saturated with a reddened fluid, and to yield a repulsive odour, much resembling that of very foetid lochial discharge. The tumour which had before been large and

turgid, could now be best compared to a superficial roughness, amid which were some more decided elevations. The os and cervix were rather tender to the touch, and so they had been at the first examination, though no sensation was communicated to the patient by freely manipulating the tumour. For the next eleven hours nothing remarkable occurred. There was a great drain from the seat of the disease of a fluid, which may be well compared to dirty and faintly reddened water. This, when excessive, was generally arrested or moderated, by injecting alum and using the plug. At 5 P.M., the labour pains became strong and frequent, but the os uteri did not dilate in proportion, and at this time it felt rigid, and on one side angular. I now introduced within the os a piece of dry sponge smeared with oil. From this time the pains became almost constant, and the dilatation of the os was evidently considerable at 7 o'clock. For some hours there had been little loss of blood; and till 8 P.M. I did not think that any further interference was likely to be required. At this time, however, there was a sudden accession of hæmorrhage; and as the os uteri was now pretty well dilated, I punctured the membranes, and administered three successive doses of the ergot of rye. A living child was born at 9 o'clock; the placenta soon followed; and the uterus contracted naturally. After taking some tea with toast and a little brandy, she fell asleep; and I then left her with pretty a good pulse.

On the following morning, I found that she had passed an excellent night, without requiring to take the opiate draught which I had conditionally ordered. I found the tumour had regained very much of the same character as when I first explored it, though it was much less bulky. It was still destitute of sensation, but around its base there was a good deal of tenderness complained of. Everything went on well till the fourteenth day—the strength increasing, the ability to nurse good and improving. The lochial discharge—or at least a moderate sanguineous discharge—continued. In consequence of local pain, I was asked to examine the womb. I did so, and found a state of matters very similar to what I had found at my last examination. I took occasion, however, to explain the nature of the case, and to hint at the necessity which might arise for operative interference. She, however, could not be persuaded, that if she had so long had the disease without knowing it, it could now be necessary to regard it in so serious a light.

With difficulty she consented to a consultation. About the twentieth day after her confinement, Dr. Henry Bennet saw her along with me; and in consequence of the pain which she felt in the base of the tumour, and the return on two occasions of alarming hæmorrhage, we both agreed that it would be proper to remove the diseased mass, with the portion of the uterus to which it was attached, without much longer delay. She objected, however; and thus much precious time was lost, both as regarded relief from pain, and an ultimate cure.

Some time afterwards, when the disease had considerably advanced, when no sleep could be had at night without an opiate, and when there was a good deal of tenderness in the parts, she was seen by Professor Fergusson, who discountenanced operative interference, from his conviction that it would not accomplish a radical cure. He did not, however, absolutely negative the propriety of the proceeding,

should the sufferings of the patient so increase as to make her desire relief by the knife or ligature. The debility and timidity of the patient increased; and thus much more time was spent. I may here state, that during the first part of this time great abatement of the discharge was obtained by the internal administration of gallic acid; and that pain was restrained within the bounds of endurance by opiates. At last, it was only by an enormous consumption of morphia that life was made endurable; the attacks of hæmorrhage were frequent and frightful; and the whole of the cervix uteri and vagina was excoriated, from the foul discharge with which they were constantly bathed.

On the 6th of February 1848, at the urgent entreaty of the sufferer, Mr. Fergusson removed the diseased mass by the knife, having first put her under the full influence of chloroform, and dragged down the womb within reach. The excrescence was entirely removed, but the incision (though a large portion of the cervix was cut away), was necessarily through indurated structure. The portion of the uterus which was removed, presented hardly any indication of the spongy growth to which it had given a basement. Indeed, the naked eye could only detect a flabby granular surface; and the touch could only recognize hardness of tissue and roughness of surface. A gentleman who promised to make a microscopic examination of the excised parts unfortunately forgot to do so.

Severe sickness came on some hours after the operation, probably dependent upon the chloroform, which had been administered before and during the operation to cause anæsthesia. After this, she improved rapidly in her general health, notwithstanding several pretty severe attacks of hæmorrhage. The dreadful pain had now ceased to torment her; the appetite was good; and she was gaining flesh and strength. In a month after the operation she was able to walk out a little. About this time, however, she began to complain of shooting pains in the back and pelvic region, and occasionally at night was obliged to have recourse to an opiate to obtain sleep. The incised surface till this time had presented a smooth and healthy surface, both to the finger and to the eye; but now, upon examining with the speculum, it was found to have assumed a granular surface. This condition rapidly increased; and within two months from the operation, there was a fresh excrescence, sometimes as large as a pigeon's egg, and at other times not bigger than a hazel nut. From this growth a profuse watery discharge flowed at intervals; and as time advanced, she had every two or three days frightful hæmorrhage, which, on several occasions, had nearly proved fatal. The pain was constant and of the most agonizing character. Besides the free application of belladonna to the sacrum, she took for several weeks before her death so much as three ounces a day of the Edinburgh solution of the hydrochlorate of morphia, in clysters, and by the mouth. Ulceration went on rapidly; and the atmosphere of the room in which she lay was intolerably offensive from the discharge, though deodorizing agents were freely used.

At last this poor sufferer was released from life on the 17th July, the immediate cause of death being exhaustion, from which she never rallied, after one of the attacks of hæmorrhage already referred to. For the last three weeks of her existence these attacks had been so

sudden, so violent, and so frequent, that it had been found necessary to keep the vagina constantly firmly plugged. The parts were bathed with an infusion of opium, once every six hours, and a clean plug was changed at least once every twenty-four hours, but generally at shorter intervals.

Death occurred about seven months and a half after her delivery; and rather more than five months after the operation.

EXAMINATION OF THE BODY FORTY-EIGHT HOURS AFTER DEATH. This I made with the kind assistance of Dr. G. T. Gream and Mr. A. B. Barnes. The emaciation and anæmic condition of the body were excessive. The arch of the pubes was removed, and the abdomen laid open, so that the uterus and adjacent parts might in the first instance be examined without displacing or handling them. The cervix uteri was absent. The vaginal end of what remained of the uterus was ulcerated, as was likewise the whole of the upper part of the vagina. When carefully looked at, the surface of the uterus which had been incised was found to have on it the same flabby granulations or vascular excrescences, which were noticed in the portion removed by Mr. Fergusson. They were rather more florid. The surface on which these growths were implanted was of a hard and almost cartilaginous consistence. The body of the uterus was harder, and rather larger than natural. It was dark—as if stained with a pigment—on its peritoneal surface. The vagina at its upper part was deeply ulcerated, and was easily torn. The urethra, the bladder, the ovaries, and the rectum, were free from disease.

REMARKS. It is *possible* that if the operation had been performed earlier in this case, the result might have been somewhat better. Even as it was, life was prolonged, and a brief respite from suffering was likewise obtained. The effect of the gallic acid in restraining the menorrhagia at an early stage of the disease is an interesting fact, confirming what every one in the habit of using this medicine must have observed,—that it rarely, if ever, fails to manifest its anti-hæmorrhagic virtues, even under circumstances apparently the most different. It is a medicine which we may almost give *empirically* as a styptic, so wide is the range of its application: in menorrhagia, probably, no medicine is equal to it. Gallic acid, however, though useful in restraining the hæmorrhage depending upon cauliflower excrescence of the uterus, is not a remedy for that disease; which, so far as our knowledge at present extends, cannot, it may be safely stated, be cured by medicines or hygienic treatment.

Can cauliflower excrescence of the uterus be permanently eradicated by the knife or by the ligature? If not, can it be made less painful and less rapid in its course by surgical interference? These are the questions which demand answers.

Unfortunately, cauliflower excrescence of the uterus is not the seat of pain, except in its later stages; and therefore rarely comes under the notice of the medical adviser at that period when complete removal can only be hoped for. The case which I have detailed might have had a very different issue, if the diseased mass and the surface from which it sprang had been excised twelve months earlier,—at a time when the only symptom was the limpid discharge. Had the operation been tried with all convenient speed after delivery, the miserable existence which

the patient had after her confinement might have been ascribed by some to the use of the knife. The case must now, however, be held as proving with all others recorded, that such tumours, though they may long remain pretty stationary, at last inevitably terminate fatally. This fact is of itself a strong argument in favour of resorting to operative interference as early as possible, for it is then, if at all, that the morbid mass can be eradicated. In Mrs. G.'s case, when the operation was performed, a cure was not expected; and the knife was used only with the hope of accomplishing what was attained, a respite from impending death.

On the 3rd of Dec. 1845, Dr. Simpson read before the Medico-Chirurgical Society of Edinburgh a communication upon excision of the cervix uteri, in which he stated that out of eight cases in which he had performed this operation, in three the amputated vaginal portion of the cervix was the seat of what he terms "carcinomatous disease". In one of the cases, one of cauliflower excrescence, the patient had remained perfectly well from the date of the operation in 1840, and in the interval had given birth to and had nursed three healthy children. In a second patient, whose health and strength were greatly reduced, the excised part presented a tumour having all the microscopic and other characters of Müller's *carcinoma fasciculatum*. When Dr. Simpson read his paper to the Society, two years had elapsed since the operation, and the patient was then continuing to enjoy the best of health. In the third case, the diseased cervix presented a well marked specimen of Müller's *carcinoma reticulare*. The patient remained well for eight months, but the disease then recurred, and proved fatal fourteen months after the operation. Dr. Simpson's published experience is therefore an encouragement to operate.

A powerful argument in favour of the propriety and rationality of attempting a cure by operation is to be found in the able researches of Dr. Andrew Anderson of Glasgow.¹ He has shown that cauliflower excrescence is "a disease which cannot spread by simple germs, as ordinary cancer is supposed to do; for, in order to its growth, a regularly formed membrane is necessary, and not merely active cells; and this consideration", adds Dr. Anderson, "renders more probable the success of the operation of removal of the tumour with the portion of the os uteri from which it grows." According to Dr. Anderson, "the basis" of the cauliflower excrescence "is a membrane of extreme tenuity, ramifying most complexly, amply supplied with blood, and possessing the power of forming from that blood a whitish 'cell-substance', which is deposited in a layer around it." He conceives that "the white substance which constitutes the bulk of the structure is formed by the membrane as a matrix, and from the blood with which that membrane is supplied, by a change in the corpuscles." He had no opportunity of examining the characteristic "watery discharge"; but he believes that it will be found to flow from the white substance directly, probably in consequence of the bursting of the external layer of cells, they being as quickly reproduced within; that thus a constant drain from the blood is going on, and made more exhausting by occasional actual hæmorrhage when the tumour happens to be congested, or accidentally injured.

It appears, then, from Dr. Anderson's researches, that cauliflower

¹ ANDERSON (Dr. A.), Edinburgh Monthly Journal, vol. for 1842, p. 885.

excrescence differs from every known malignant tissue in its mode of growth. "It grows *by imbibition from the blood, but beyond the capillaries.*" This view of the morbid anatomy of the disease, its uniformly fatal issue when left alone, and the comparative success of Dr. Simpson's operations, would induce me, if consulted at a very early stage, unhesitatingly to advise excision, provided the diagnosis demonstrated the growth to be of that description which Dr. A. Anderson has described. If asked at a later period, I would not advise the same course to be adopted, unless the symptoms were, as in the case of Mrs. G., so urgent as to threaten speedy death; and then, we are not only justified in operating, but imperatively constrained to do so. If an operation be decided against, the proper treatment to adopt would, I apprehend, consist in the use of astringent anodyne injections, and gallic acid as a constitutional remedy. Each case will however demand its own special appliances.

The question as to the disease being hereditary I do not now enter upon. I may state, however, that the mother of my patient died from what was described to me as "cancer of the womb".

Essex House, Putney, November 1850.

THE CHARACTERISTIC PECULIARITIES, PATHOLOGY, AND TREATMENT OF RHEUMATISM, MORE PARTICULARLY AS IT IS FOUND PREVAILING WITHIN THE TROPICS.

By JAMES BIRD, A.M., M.D.

IMPROVED views of the humoral origin of Rheumatism have from time to time arisen, to claim the attention of the profession; and the exclusive opinions of solidism, from the beginning of the present century, have been gradually giving place to that more eclectic and rational system of pathology, which looks not on diseases as confined to particular organs or tissues, but as the manifestations of more general and deep-seated lesions, to be sought for in the abnormal deviations of the blood, and the perverted actions of the nervous system. Among those whose judicious observations have tended materially to improve our knowledge of this subject, the names of Drs. Todd and Bence Jones stand prominently forward, as worthy of honourable mention. There is yet, however, much left for study and analysis in the natural history of the disease, particularly as it is found prevailing within the tropics, among a class of patients subsisting almost exclusively on non-azotised articles of diet. Excepting fever and cholera, there is no disease which proves more fatal to the sipahies of our native army; nor is there any which annually renders so many Native and European soldiers unfit for the active duties of their profession, by placing them on the invalid or pension list. Tropical climates seem to have considerable influence in modifying the character of rheumatism among the people of India; and the completion, in that country, of a truly philosophical investigation into the chemical pathology of this and other diseases, might be attended with useful results, in helping us to ascertain the true nature of the rheumatic diathesis, its modifications