tried bromides in vain, and permanganate of potash had no effect on the amount of the discharge. Her descriptions of the severity and nature of her head-symptoms were very vivid, and led me to think that if no relief were procured, epilepsy would ensue. A very curious symptom also occurred, which impressed me much, namely, that her hair, which was short, dark, and curly, became within a few months quite grey. Although her appearance was not that of a person suffering from fulness of blood, I felt that the case was very urgent, and accordingly subjected her to the stem treatment, with the result that the next period was copious and prolonged. Her head was completely relieved; and at the present, two years afterwards, she is in good health.

I could give numerous instances of the success of this mode of treatment, but I have also met with some failures. Still it is the best and most certain means there is of bringing on absent menstruation, or of increasing the flow where it is present but deficient in amount. Any kind of stem may be used. I have found Wynn Williams's very efficient, and it has the great advantage of not being easily expelled from the uterus, which sometimes occurs with Greenhalgh's rubber stem. I have also used Chambers's stem with advantage, but it is liable to "prick," and I prefer the other two. I have also had made what may be called an artificial polypus, to remain entirely *in utero*.

The treatment of amenorrhœa by means of stems is briefly referred to both by Dr. Barnes and by Dr. Edis in their excellent works on *Diseases of Women*, but the allusion is contained in two or three lines only. There is also a reference to it in a paper by Dr. Routh, in the fifteenth volume of the *Transactions of the Obstetrical Society of London*, but the case given is one of amenorrhœa from obstruction, and requiring the use of the hysterotome. Treatment of amenorrhœa by dilatation of the cervix has been used in America by Dr. Carstens, of the Detroit Medical Society; and as before the use of a Greenhalgh's or Williams's stem it is generally or often necessary to dilate slightly, this dilatation may to some extent assist in producing the result. For several years I thought this mechanical treatment was original, as the well known galvanic stem acts in a different way altogether, and is considered especially suitable for cases of infantile or undeveloped uterus. I am satisfied, however, that the possibility of treating successfully cases of amenorrhœa and scanty menstruation in the way described is almost unknown to the majority of the profession.

LACERATION OF THE CERVIX UTERI, AND ITS RELATION TO MALIGNANT DISEASE.¹

By W. D. SPANTON, F.R.C.S. Ed.,
Surgeon to the North Staffordshire Infirmary.

THE importance of this condition has been made more manifest since recent observations have shown that it may be the precursor, if not actually the cause, of a large number of uterine ailments. Dr. Thomas enumerates no less than twelve of these as resulting from laceration of the cervix, and among them he places epithelioma. Other authors state the same thing, while some go so far as to declare that a large proportion of the cases of cancer we meet with in that region result from a damaged cervix.

Whether this be accepted as a broad rule or not, the case I am about to mention is an illustration that cancer is sometimes the outcome of a torn cervix; and the frequency of such sequence can be estimated only by long and careful observation of a large number of cases.

The usual effects of a laceration or fissure of the cervix are sufficiently well known, and are most commonly seen in the persistent subinvolution of the uterus, which leads to retroflexion with its attendant discomforts, and to functional menstrual disturbance. In a case which came under my care not long ago, persistent and alarming menorrhagia occurred to such an extent as to place the patient's life in imminent danger. The patient was a married woman, about 36 years of age, whom I saw in consultation with Dr. Partington, in June last. She was then, and had been for six months, suffering from severe but not constant hæmorrhage, passing large coagula with great pain. She had four children, the last one having been born ten years before.

The uterus was large and retroflexed, the cervix deeply lacerated posteriorly, and the anterior lip large, indurated and everted. Various forms of treatment were adopted, including a pessary, but without any benefit, and I then advised Emmet's operation for the cure of the laceration and the removal of the hypertrophied anterior lip. This was done on June 21st, and from that time rapid progress took place. The silver wire sutures were all removed by the tenth day; good

union took place, and the same pessary which before had been useless, was quite effectual in maintaining the proper position of the uterus. Shortly afterwards all hæmorrhage ceased, and the patient is now menstruating regularly, and is perfectly well and active. This instance serves to show how impossible it is to cure the patient suffering from the effects of this condition until the cause of it has been remedied. The signs indeed which we commonly recognise in cases such as this are after all but the results of an anterior condition—the laceration—which must be remedied before any success can be attained in the treatment.

A more important question arises when we come to consider whether and how far the injury I have referred to conduces to the formation of cancer in that region.

A married woman, aged 39, came as an out-patient of the North Staffordshire Infirmary in May last. She was suffering from great uterine discomfort rather than pain, bearing down, and the usual train of symptoms associated with endocervicitis. There was no uterine displacement, no enlargement, but only a deep single fissure through the uterine cervix, both labia being ectropic. There was no indication whatever of anything in the shape of malignant disease.

After finding ordinary treatment of no avail, I advised the performance of Emmet's operation to be performed, and for that purpose the patient was admitted into the Infirmary in July, 1886. After a few days' rest in bed I made an examination, and found a condition resembling that figured in Thomas's work, a deep fissure dividing the posterior lip into two unequal parts, one being slightly more thickened than the other, and having the appearance usually found accompanying erosion of the entrance to the cervical canal. There was some glairy leucorrhœal discharge, with sense of weight and general pelvic discomfort on moving about. For various reasons the operation was postponed until about five weeks afterwards; and when I came to examine the parts for that purpose, I was astonished to find a large mass occupying one half of the cervix, which was clearly malignant in character. So instead of doing, as I had proposed, trachelorrhaphy, I was compelled to remove this cancerous mass with the *écraseur*. The patient soon recovered from the effects of the operation, but, I am sorry to add, is now confined to bed at home with rapidly progressing epithelioma.

We have, therefore, in this instance a clear illustration of the possibility of cancerous growth supervening on simple hyperplasia of a damaged cervix, and, once begun, running a rapid malignant course; and this is the point to which I wish to draw attention. I am quite sure it is one which deserves careful consideration, and should lead us to remedy as speedily as possible every case of laceration or fissure of the cervix which gives rise to symptoms which do not at once yield to the ordinary local remedies.

I have now operated in many of these cases, and have never yet had occasion to regret having done so, nor have I seen, so far, any ill results from the operation itself.

CUCAINE IN LABOUR AND GYNÆCOLOGICAL CASES

By GEORGE H. ROQUÉ DABBS, M.D., SHANKLIN.

As long ago as February, 1885, I wrote a short note to the JOURNAL, stating that I had used cucaïne (a 12 per cent. solution) as a local anodyne to the os and cervix in primiparous cases, and that the application was, so far as I then could say, with my limited experience of its use, worth a trial at other hands. Since that date I have steadily gone on using it, and to simplify my present observations I will tabulate them thus:

1. I obtained equally good results from a 6 per cent. solution as from a 12 per cent. solution (of the hydro-chlorate), but in dry labours I now always use a 4 per cent. solution of the alkaloid itself in castor-oil. Into the thin, parchment-like os I put a cucaïne-saturated plug of cotton-wool, which I renew (or rather replace with a fresh plug) about every half-hour, until fair dilatation has taken place.

2. In cases in which the labour progresses so slowly that some assistance is needed, and yet the cucaïne need not as yet be deposited in favour of chloroform, the form in which I have found ergot of most benefit has been as a hypodermic combination of sclerotic acid, gr. $\frac{1}{4}$, and bimeconate of morphine, gr. $\frac{1}{8}$. By means of Burroughs's tabloids I have been thus able to secure a certain degree more of uterine action, and with the bimeconate of morphine combined with the sclerotic acid and the internal application of the cucaïne, have now seen many cases of almost absolutely painless dilatation of the os.

3. But of all uses for cucaïne in connection with first labours, I have obtained the most gratifying results from the application of a

¹ Read before the Staffordshire Branch.

12 per cent. solution to the vulva and inside of the vagina during the slow progress of a case of marked perineal rigidity. I do not of course mean that the case is hastened much, but I do mean that the pain is lessened to an extraordinary degree.

4. My observations lead me to conclude that it is chiefly in primiparous (slow) labours that cocaine is of use (notably in breech cases), or in any case possibly in which the os dilates slowly and the perineal rigidity is well marked.

5. In cases in which the os has to be dilated by tents, I have soaked and partly enlarged the tents in a hot oleaginous solution of the alkaloid before introducing them, with, as I think, considerable success; and in cases of tender and irritable vaginae in which, for any reason, the speculum has to be used (gynaecological cases), I have adopted the practice with great advantage of previously painting the vaginal walls with the solution of cocaine in castor-oil before alluded to.

I am quite conscious that all the foregoing may be a "twice-told tale" to many of your readers, but as anything that tends to mitigate the patient's pain and the practitioner's weariness is important, I have ventured to give you the above summary of three years' observations, none of them claiming to be more than suggestive, but all I hope fairly accurate.

ON AURAL EXOSTOSIS.

By GEORGE P. FIELD, M.R.C.S.,

Aural Surgeon to St. Mary's Hospital.

THE following cases of operation for the removal of aural exostoses, given in the order of their occurrence, are in continuation of the series published by me in the JOURNAL for February 20th and 27th, 1886, pp. 338 and 385.

It is still not uncommonly stated that, except in urgent instances, this operation should never be attempted, and for the assigned reasons that its risks are very great, and the benefit likely to be derived from it but small. Now, in publishing this second series of cases—which, be it noted, are not selected, and may therefore be regarded as representative—I wish again to emphasise the fact that, whereas the risks of the operation, when carefully performed, are practically *nil*, the benefit to be derived therefrom is lasting, and to many people of the utmost importance. That, moreover, the operation, by providing a vent for pent-up pus, may give relief from serious and ever-present danger to life, is another fact which I have, with good cause, insisted upon in the past. It was but a few months ago that I had occasion to strongly recommend a gentleman to permit the removal from one of his ears of a large exostosis. Behind it there was an accumulation of pus, for which there was no external outlet save a small aperture, the closure of which might at any time jeopardise his life. This gentleman's medical man, however, decided—on what grounds he did not demonstrate—that the risks of an operation would be too great, and accordingly nothing was done for the ear. If this patient's ear escapes becoming completely blocked, and he has no further trouble with it, it may even be maintained that an operation could never have been desirable; for there are some persons who seem to be quite content that, if not they, certainly their neighbours, should go through life providentially afflicted with a large amount of preventable deafness, and exposed at all times to a remediable chance of meningitis or cerebral abscess. The condition of the gentleman just referred to reminded me very much of that of Mr. F. G., of Ipswich (Case XIII in the series I published a year ago), when, contrary to my advice, he put off operation until a more convenient season, thus compassing his own death. The great and lasting benefit that an operation may confer is well shown by my first case, Dr. G. M., who since 1877 has never for a day lost his hearing, though before then he was stone-deaf from exostosis in both ears, and consequently debarred from society and the active exercise of his profession.

As I have already pointed out, the presence of exostoses is no certain evidence that operation for their removal is desirable. Multiple exostoses not infrequently leave, by mutual interference of growth, a passage in the meatus quite adequate for the conveyance of sound, and need not therefore be interfered with; and, again, the very deep situation of a growth in the meatus may render any attempt to remove it hazardous. With these limitations it may confidently be maintained that in all cases where the presence of a hard aural exostosis is a source of inconvenience or danger to a patient, its extirpation should be effected; and to this end the safest and most satisfactory means is undoubtedly the employment of the drill. It remains for me to add that in operating I now use for the protection of the middle ear, instead

of a guard to go behind the exostosis, what I regard as an important improvement upon this, namely, a small cross bar at the end of the

drill-holder (as made for me by Mr. Hawksley, see fig. 1). This prevents the insertion of the drill into the meatus to a depth greater than its exposed length (Fig. 2), and all risk of a slip of the instrument is thus obviated. Fig. 3 represents the drills of various lengths.

CASE XVII.—D. McC., a boy, aged 6½, was sent to me by Mr. F. W. B. Jones, of Ross, on February 8th, 1886. I found the right meatus occupied by an exostosis, seated on the anterior wall, the origin of which was doubtless attributable to abscess during an attack of measles in March and April, 1882, and remittent otorrhoea. After operating with the drill on May 3rd, 1886, I followed my usual course of treatment in such cases, under which the discharge gradually ceased, and hearing was much improved.

CASE XVIII.—H. G., a clerk, aged 31, came to me at St. Mary's Hospital, April, 1886, complaining of increasing deafness of the right ear. Fifteen years previously he had experienced whistling noises in the ear, and, after somewhat more than a twelvemonth, during which there was discharge from each meatus, he had noticed that his hearing was becoming impaired. He was treated awhile for the discharge and deafness, but, he says, without success. On admission at St. Mary's, the patient stated that there had been numerous abscesses in his right ear, which had always been worse than his left; also, that he had first noticed obstruction in the right ear eight months previously, when pieces of bone-like fragments of honeycomb used to come from it. I found the right external auditory meatus to be blocked by an exostosis of soft cancellous tissue. Operating on May 12th, 1886, after administration of an anæsthetic, I broke away the growth bit by bit. The subsequent treatment, which was followed by restoration of hearing, consisted in the careful maintenance of cleanliness of the meatus, and the local use of stimulant antiseptic lotions.

CASE XIX.—F. W. B., a gentleman, aged 20, who came to me October 18th, 1886, first noticed a discharge from the right meatus about 1872. For this he can assign no origin, save possibly a scald in childhood. Nothing was done for the ear, beyond the application of a blister or two behind it, until May 1st, 1879, when a polypus was detected. The removal of this was deferred in consequence of an attack of scarlet fever on May 5th, but was subsequently effected. At Easter, 1886, there was slight bleeding from the right ear for two