

with half an inch of shortening due to angularity at the point of fracture. Absenting himself for a month he then returned with more angularity still. In this case the pins were not kept in long enough and he ought not to have been allowed to escape from observation. He slept well the night after the operation and never complained of pain nor had he any rise of temperature. The pins caused no irritation. They were merely improvised out of a stout, old white-metal wire retractor (plated). The man lay in a long splint with 7 lb. weight extension and the pins were *in situ* until the forty-third day after operation and the fifty-third after fracture. There was no pain and no sign of irritation, general or local. His temperature remained normal except two days after operation, when it reached 99.4°. Firm union resulted without the slightest shortening. When the dressings were removed the pins, which had been imbedded for forty-two days, were found to be a good deal rusted, exciting superficial supuration at the orifices of the puncture but no pain or rise of temperature. Under boracic dressing the punctures healed in a few days. I am sorry to say that this patient fell down, owing to his crutch slipping, and rebroke the femur, but probably without tearing the periosteum, as there was no deformity, no shortening and no swelling, but only tenderness and weakness.²

It is demonstrated, therefore, that the pins can be left painlessly and apparently without doing harm in the femur, and that, in combination with simple extension and the long splint, they can completely prevent shortening. With regard to the best time for inserting them I should recommend about ten days to a fortnight after the accident. By then effusion should have become either absorbed or organised, leaving only well vitalised tissues to deal with any germ that might accidentally enter. By that time, also, it would be seen whether thorough reduction and ordinary appliances would suffice for the case or not, and at that period, also, the tracks made for the pins need not communicate with the fracture itself.

Grosvenor-street, W.

TWO CASES OF VAGINAL HYSTERECTOMY FOR CANCER.

By ARTHUR H. N. LEWERS, M.D. LOND.,
OBSTETRIC PHYSICIAN TO THE LONDON HOSPITAL.

CASE 1.—A woman aged forty-two, who had been married twenty-two years and had had one confinement a year after marriage. It was a difficult labour, instruments having to be used and there was post-partum hæmorrhage. She was in bed for three weeks afterwards and suffered from great pain in the lower abdomen and feverishness. The child only lived half an hour. The patient was quite well until September, 1888, when she had a sudden discharge of blood in large quantity, and from that time till the date of her admission to the London Hospital on Oct. 8th, 1889, she had been almost continuously losing blood. The red discharge had only stopped once as long as five days during all that time. This was about a fortnight before she came into the hospital. She had only had pain when clots were being passed, the pain then being only slight, and something like labour pains. The discharge was not offensive till a week before her admission, when it became slightly so. Her impression was that she had been losing flesh, but she was not very clear on this point. The catamenia appeared when she was twelve years old, and previously to the present illness she had always been regular every four weeks, and had had no pain at her periods. She was admitted from the receiving-room on account of the bleeding, and, as I happened to be in the ward at the time, I saw her at once. She was losing a good deal of blood. On vaginal examination a soft, friable, cauliflower-like mass, the size of a goose's egg, was felt projecting through the os uteri. The os was widely dilated. No part of the growth was attached to the rim of the os, but the attachment seemed to be situated high up in

² In a fortnight the limb was apparently quite firm and strong again, without deformity and without shortening. Such a quick union will seem almost incredible to surgeons familiar only with ordinary fractures, which are, of course, caused by considerable violence and accompanied by great damage to the periosteum; but after refracture from slight causes reunion is usually very quick, probably because the fibrous parts clasping the fragments together are so little disturbed.

the uterus. The growth exactly resembled the ordinary cauliflower-like mass so commonly met with in cases of cancer of the cervix; it broke readily under pressure with the finger, and the pieces that came away had a yellowish colour. I had no doubt that the growth was malignant, and as the patient was losing a good deal of blood I removed the growth at once with the écraseur and scissors, cutting through the attachment as high as possible. No anæsthetic was given. The patient was waxy-looking and extremely anæmic. The growth was so obviously malignant that unfortunately none of it was kept for further examination. It seemed to me that most likely it was a case of polypoid cancer of the body of the uterus, and the removal of the growth as described was only intended as a temporary and preliminary measure. On Nov. 7th, the patient being under the influence of ether, the cervix was rapidly dilated with Hegar's dilators till the finger could be passed into the body of the uterus. There was nothing to indicate any disease of the cervix, but an irregular patch was felt on the posterior wall of the body of the uterus, suggesting that the attachment of the mass removed might have been there. I decided to extirpate the uterus. After freeing the cervix from its attachments as high as the internal os and opening Douglas's pouch, the uterus was retroflexed and the vesico-uterine pouch of the peritoneum opened. The broad ligaments were then tied, and also clamped with large pressure forceps, which were left on, and the uterus was removed. One suture was used to close the aperture in Douglas's pouch, and a small drainage-tube was left just within the peritoneum. The vagina was then filled with carbolic gauze sprinkled with iodoform. The plug was removed the next day, the small drainage-tube coming away with it, and vaginal douches of weak iodine-water were given every four hours. On Nov. 9th, forty-eight hours after the operation, the pressure forceps were removed, a small Keith's tube being left in the vagina, and a pad of salicylic wool was placed over the lower end of it to receive the discharge. The highest temperature after the operation was on the evening of Nov. 9th, when it reached 102.2°, and the highest pulse rate was 120. After Nov. 12th the temperature never rose above normal. On Nov. 21st the suture that had been used for Douglas's pouch was removed, and the ligatures that had been employed for the broad ligaments came away. Several offensive black sloughs were removed from the site of the wound by mopping it with wool. On Nov. 28th, three weeks after the operation, an examination was made, and there was seen at the site of the wound a curious somewhat conical-shaped red body, half the size of a walnut, projecting into the vagina. It looked as if it might have been half of an ovary prolapsed and fixed in the wound. The patient went home on Dec. 7th. I did not see her again for a long while. In January, 1891, Mr. Bishop, who was my clinical clerk at the time, succeeded in tracing the patient. She said she was quite well and had no discharge, and she had promised to come up to the hospital to see me. She came, in August, 1891, and on examination the projection into the vagina at the site of the wound was found to be exactly as I have already described. The patient was quite well.

CASE 2.—A woman aged forty-one was admitted into the London Hospital under my care on Oct. 11th, 1890. She had been twice married, having had three children by her first husband and none by the second, to whom she had been married twelve years. She had never had any miscarriages. It appeared that for some time previously to admission the patient had had a red discharge in the intervals between her menstrual periods, and this had been so for more than twelve months. The metrorrhagia at this time was continuous, so that she did not know when the proper menstrual period occurred. There had been no offensive discharge. She had had an occasional feeling of weight in the pelvis, but had not had any actual pain. She had for some time had a sensation of great discomfort if the bladder was not frequently emptied. She had lost flesh and strength during the last three months, but her appetite was fair. The menstrual history previously to the present illness presented nothing requiring special mention. On admission she was examined under the influence of ether with a view to deciding whether or not an operation was advisable. The cervix was seized with a vulsellum and was drawn down to the outlet of the vulva. A definite cauliflower-like growth was seen on the posterior lip, bleeding freely when it was touched. The uterus was of about the ordinary size, and was freely movable. There was slight "thickening" to be felt in the left lateral fornix, such as might be due either to a former attack of pelvic inflammation, or to extension of the growth from the cervix in that direction. It

seemed to me that it would be best to operate and decide during the operation whether only to perform supra-vaginal amputation of the cervix or complete hysterectomy. The operation was performed on Oct. 23rd, when the patient was anaesthetised first with ether and afterwards with the A.C.E. mixture. The operation was begun as if only for the supra-vaginal amputation of the cervix, but it soon became clear that the "thickening" felt to the left was due to extension of the cancer in that direction, and that the removal of the cervix would not remove all the diseased structure. It seemed to me to be worth trying to get beyond this infiltration by removing the whole uterus and clamping the left attachments of it with large pressure forceps outside the infiltration, the object being to get the parts internal to the pressure forceps to slough, and so obtain a complete removal of the diseased tissue. Pressure forceps were used to secure the broad ligaments on both sides, but special care was taken to place the pair on the left broad ligament beyond the infiltrated area already mentioned. No ligatures were used, nor was the opening in Douglas's pouch sutured. The vagina was packed with carbolic gauze and the patient was sent back to bed. The operation lasted an hour and a half. The gauze was removed twelve hours, and the pressure forceps forty-eight hours, after the operation. The vagina was douched with weak iodine water every four hours after the removal of the gauze for some days. A very remarkable feature in this case was the occurrence of hæmaturia soon after the operation. The urine was, as usual, drawn off regularly with a catheter. It was obviously mixed with blood, and both blood-corpuscles and blood-casts were to be seen on examining the deposit from the urine under the microscope. This condition of the urine continued till the 23th, after which it ceased, but there was some albumen in the urine till Nov. 4th, after which none was found. On Nov. 6th a large cavity was to be seen at the top of the vagina on examination, its surface being covered by a very offensive black material. From that date to Nov. 20th the cavity contracted very much, all the sloughs having come away and the surface presenting a healthy granulating appearance. On the 28th the granulating surface was touched with nitrate of silver. On Dec. 4th the granulating area was only the size of a shilling and it was again touched with nitrate of silver. The patient got up on Nov. 21st and went home on Dec. 5th. The highest temperature after the operation was 100.4°, and after the fourth day it was not above normal. From Nov. 7th weak lead lotion was substituted for the iodine water in the vaginal douches. There was remarkably little pain after the operation. The growth on microscopical examination proved to be a columnar-celled epithelioma. I have seen the patient at the London Hospital and have examined her there many times since the operation, the last occasion being on April 13th of this year (more than two years since the operation). There has never been any sign of recurrence. Her weight on Dec. 1st, 1890, was 7st. 3½lb., and on April 13th, 1893, it was 7st. 10lb.

Remarks.—I have now had seven cases of total extirpation of the uterus for cancer, with one death. The two cases just recorded are the third and fourth cases in the series. The subsequent history of the patients after this and other operations for cancer is, of course, almost as important as the immediate result of the operation. It is generally considered that an immunity from recurrence for at least two years should follow the operation to make the result really satisfactory. As my fifth, sixth and seventh cases have been within the last two years I have not thought it desirable to publish them yet. I may say, however, that the fifth case, one of primary cancer of the body of the uterus, is still quite well (more than a year since the operation); that the sixth case, one of cancer of the cervix extending up to the internal os uteri, is still well (eleven months since the operation); and that the seventh case, one of primary cancer of the body of the uterus, is quite well, but it is only four months since the operation. I hope to record these cases fully at a future time. The question as to whether total extirpation of the uterus or the supra-vaginal amputation of the cervix should be the usual operation for cases of cancer of the cervix suitable for radical treatment cannot yet be regarded as settled. Certainly very satisfactory results may in some cases be obtained by the supra-vaginal amputation of the cervix, and I myself recorded several such cases in a paper read before the Royal Medical and Chirurgical Society on Dec. 13th, 1892. On the other hand, it appears to be certain that in some cases, even when the disease is apparently in an early stage, and limited to the vaginal portion of the cervix, the body of the uterus may nevertheless be involved. Professor Pozzi has recorded evidence in support of this view

It still, however, seems probable that this is rather an exceptional occurrence as regards early cases of cancer of the vaginal portion; but as far as it goes it is, of course, an argument in favour of extending vaginal hysterectomy to all cases suitable for operation at all, inasmuch as one cannot tell beforehand whether or not the body of the uterus has been affected in the way described by Professor Pozzi. The mortality of the two operations respectively becomes, therefore, very pertinent to the question at issue, for if it were equal complete hysterectomy would be generally preferred. At present it certainly appears to be the fact that vaginal hysterectomy is more dangerous than the supra-vaginal amputation of the cervix. My own experience, as far as it goes, favours this conclusion, for whilst I have had seven complete extirpations with one death, I have had twenty-two supra-vaginal amputations without any mortality.

SUDDEN DEATH IN A CASE OF HYSTERICAL VOMITING.

BY TOM ROBINSON, M.D. BRUX., L.R.C.P. LOND.

THE words of Dr. Sutton¹—"Hysteria is now admitted to be a very serious condition; it may cause more misery in a family than cancer or other gross morbid changes"—came vividly before my mind when returning from a necropsy on the case which I am anxious to bring before the profession. Briefly this is the history. A girl at the age of puberty (a seven-months' child) began to show all the varied manifestations of the hysterical picture; sometimes it was one symptom, sometimes another. She married and for some time there was a more harmonious working of the organism. She became a mother twice and on the last occasion she suffered from pelvic cellulitis and lost much flesh. There is some obscurity about the medical history at this time, as the patient was in one of our colonies and far removed from skilled medical aid, but it is certain that she commenced vomiting at the end of 1891, and practically the vomiting continued from that date until her death, which took place on May 25th. The patient came first under my observation in March of this year and, after an examination of the case, it was not possible to detect any evidence of organic disease. The chief symptom was sickness—sickness which was not preceded or succeeded by pain. The food would simply be gulped up as easily, as painlessly and with as little effort as a man empties his rectum. Sometimes it would be retained for as long as half an hour and at other times it would be ejected at once. The frame was terribly wasted, the extremities were cold and the temperature in the mouth was only 95°. There was a drawn, anxious expression on the face, and a restless irritability which is so often to be found in those who are weak. The case had been under the observation of Mr. Frank Corner, to whom I am indebted for the opportunity of seeing the patient. The treatment advocated was sponging, air and exercise combined with simple food and absolute change, and she went to Hastings and stayed there for some weeks. Whilst at Hastings there was an improvement in the aspect and mental state of the patient. She was more cheerful and sometimes retained her food, but there was no gain in weight or increase in temperature. It ought to be stated that menstruation had been absent for more than a year and that the bowels acted at intervals. One morning in May she was able to do some shopping in London, and in the afternoon went by train to a London suburb (quarter of an hour's ride). She was met at the station and taken to her friends in a Bath chair. She dined with the family, eating a little salmon and lamb (it is not in evidence whether this was vomited or not), and at 9 P.M. she retired to bed, having drunk a little coffee before doing so. Nothing was known of the patient during the night as she slept alone, but in the morning she was found dead and the medical man who was called in found evidence which proved she had been dead for some hours.

A necropsy was made thirty-six hours after death by Dr. Coleman and myself, the result of which may be briefly stated. The whole frame was greatly shrunken, but there was no evidence of the tongue being bitten or of a struggle having taken place. The heart was not weighed, but it was small in proportion to the size of the patient. The valves

¹ Lectures on Pathology, p. 447.