tumour was very much smaller in size than had been anticipated—a not unusual experience in renal surgery. The kidney stripped readily in its upper half, the lower half to which the enlargement was confined, was stripped with the greatest difficulty, and then incompletely. The incision at this stage was enlarged, and the kidney, with much thickened capsule adherent at its lower border, was delivered. The condition was then found to be as follows: The upper half of the kidney was healthy in appearance and supple;

Fig. 5.—Case III. *a*, line of incision for removal of cyst. *b*, line of incision for removal of tuberculous disease. *c*, ligature applied to branch of renal artery.

the lower half was enlarged, tough with thickened capsule, but in places soft and friable, and beads of pus oozed out here and there. The pelvis of the kidney was healthy, and the ureter, which was subsequently dissected clean for 4 inches, was normal. It was clear that the disease, being limited to half the kidney, might be removed and the upper healthy portion of the organ left. The renal vessels were then grasped by the fingers of an assistant and I made two incisions, the first from before backwards and upwards, the other from behind forwards and upwards into the kidney well beyond the disease. The incisions met in the centre of the kidney and enclosed a wedge of renal substance, above the disease, between them. The severed surfaces of the kidney were healthy. At the inner part of these incisions a small portion of the pelvis was removed with the lower end of the kidney. Through this opening a large probe explored and demonstrated the patency of the ureter. A branch of the renal artery and a large tributary of the renal vein were ligatured. A continuous Lembert stitch was then made to unite the cut edges of the pelvis and was continued on into the kidney substance so that, when the kidney wound was stitched up, a portion of this suture was buried. The edges of the kidney incision were then brought together by stout catgut interrupted sutures introduced with a large curved intestinal needle at intervals of about half an inch. On relaxing the pressure upon the renal vessels the wound remained dry. Some thickened masses of tissue, the result of a chronic sclerosing perinephritis, were carefully dissected out, the most tiresome dissection being carried out upon and around the vena cava. The kidney remnant was replaced, the incision in the parietes stitched up in tiers, and a drain of gauze left hanging from the posterior end of the wound. A photograph of the resected portion of the kidney (without the thickened capsule which was also removed) is reproduced (Fig. 6). It shows quite clearly the localised deposits and the healthy margin of kidney tissue.

After-History.—The patient recovered slowly from the operation. She is now (January, 1902) quite well. The urine is normal and the wound soundly healed.

Report upon the Specimen by Dr. W. M. Smith.

In the cortex is a growth about an inch long and half an inch in breadth at its widest part. It is of a pale colour. In its substance are a number of yellowish points. Throughout the other parts of the cortex, also are small deposits of this yellow material. The growths are not bounded by any zone of fibrous tissue, but at their periphery is a line of

intense hyperaemia. The external surface of the cortex is very vascular. The capsule of the kidney is very thick, and contains a large amount of fat. Under the microscope the growth consists of elongated and rounded faintly staining cells. They have numerous long slender processes, which form a felt network which extends throughout the whole kidney substance. This is apparently causing atrophy of the normal kidney

Fig. 6.—Showing the wedge removed from a kidney, and the interrupted catgut sutures.

structure. In the substance of the growth are numerous small vessels with very thin walls. There is a great infiltration of multinucleated leucocytes into the tumour, which at places almost obscure the tumour growth. The periphery of the cortex shows great haemorrhages, but in it can be seen the tumour cells. The growth appears to be of the nature of a myxosarcoma which is undergoing inflammatory change. To the naked eye the growth resembles very closely a localised tuberculous deposit undergoing caseation; this was the diagnosis made at the time of the operation. The treatment was based upon the diagnosis.

RECURRENT CARCINOMA TREATED BY THE ROENTGEN RAYS.

By G. B. FERGUSON,

Senior Surgeon, Cheltenham Hospital; President, British Medical Association.

THE salutary influence of the Roentgen rays on cancer is quite remarkable, and to judge from what I have already seen I will venture to predict that the day is not far distant when their use for diagnosis will be a small matter in comparison with their employment for the relief and arrest of cancerous and allied growths and ulcerations.

A few months ago a lady consulted me for a recurrent scirrhus growth, of the size of a hen's egg, on the manubrium of the sternum. The growth was fixed, and apparently growing from the bone. Below it was a hardened ulcerated surface about two inches square. Her left arm was greatly swelled, and extensive deposits could be felt in the axilla. She had been operated on for scirrhus mammae three years previously by an eminent Liverpool surgeon, who also saw the recurrence, but refused to attempt any further operation. Notwithstanding her entreaty, my advice was the same, as was also that of a well-known Birmingham surgeon, whom she also consulted.

After a good deal of palliative treatment, which I need not specify, and as she was steadily getting worse, I advised the use of the Roentgen rays. These were employed at the Cheltenham Hospital for twenty minutes on as many days. The treatment was somewhat pressed as she was obliged to leave Cheltenham a few weeks after its inception. After an absence of a month she has now returned in excellent health and spirits, for the sternal growth has completely disappeared, the ulcerated surface has healed, and her pain, which was considerable, has greatly lessened, being now confined to the arm alone, the swelling of which has much diminished.

There is still some deposit around the axillary vein, but, seeing what has already happened, I am hopeful that a further course (which is about to begin) of the "rays" will remove that also. A 12-inch spark coil was employed, and the distance of the tube from the body was from 8 to 10 inches. Notwithstanding a mask of mackintosh she became much "rays burnt" in the face, and she has lost both her eyebrows. But what are these drawbacks compared with what she has gained?

At the same time an intractable case of rodent ulcer of the face has been healed by the same treatment in the same institution. The first-mentioned case has been seen by several of my colleagues, all of whom unite in expressing their surprise and satisfaction. One of them saw the patient also just before the use of the rays.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

OÖPHORECTOMY IN THE TREATMENT OF CANCER OF THE BREAST.

WHILST reading the account of the interesting cases related by Mr. Butlin, in which oöphorectomy had alleviated or cured malignant disease of the breast, I was struck by the frequency with which thyroid extract was employed in the treatment. It seemed to me that, perhaps, oöphorectomy was receiving more than its fair share of credit, especially as in my own experience thyroid gland has been the means of completely removing all evidence of cancer in an undoubted case of malignant disease of the uterus with secondary growths in the neighbouring viscera.

The case to which I refer occurred in my private practice, and from my rough notes I find that Mrs. C., aged 51, came under my care in July, 1900, having been under treatment in a nursing home off and on for the previous twelve months.

About two months before she came to me, Sir John Williams and Sir Francis Laking had in consultation decided that the case was one of malignant disease, and that it was too late to advise an operation.

Upon examination I found all the signs of advanced uterine cancer to be present. There was a hard mass between the uterus and rectum, which bled easily: the uterus was fixed and enlarged. From the peritoneal surface on the right side there was a hard irregular lump, measuring 5 by 4 inches, growing upwards. There was a nodular growth springing from the lower border of the right lobe of the liver, and an enlarged gland as big as a marble in the right groin. The patient was extremely emaciated, confined to bed, and suffering great pain. There were the usual pressure symptoms shown by the other pelvic organs, and occasionally a blood-stained discharge from the vagina.

The only indication was to allay pain and to render life endurable. Towards the end of November there was so much suffering that I asked Sir Francis Laking to see her again. We agreed that treatment must be directed wholly for the relief of pain, and that the case was rapidly nearing its end. A month longer seemed more than could be expected.

I now determined to try the effect of thyroid extract. Commencing with 5 grs. daily, the dose was quickly increased to 20 grs., with a result that was little short of marvellous. Convalescence began immediately, so that by the end of January the patient was up and free from pain. At this time the various growths were much reduced in size, and weight was being rapidly regained. When I last saw her in October she was quite well and was following an active life; nothing abnormal was to be felt in the pelvis.

I am of course aware of the danger of arguing from the result obtained in a single case, but in this instance the improvement followed so quickly upon the employment of the remedy and was so striking, that in my own mind I have not the slightest doubt that it was entirely due to its use, and I am equally certain that thyroid extract should always be given a trial in this class of case before more heroic measures are adopted.

Cloughton.

H. ATWOOD BEAVER.

SUPRARENAL EXTRACT AS A HAEMOSTATIC IN HAEMOPHILIA.

IN THE BRITISH MEDICAL JOURNAL of November 23rd Mr. W. Thelwall Thomas, writing upon the value of suprarenal extract as a haemostatic, remarks that Dr. F. Grünbaum doubts the efficacy of the drug in cases of haemophilia, assuming as he does that the condition is due to congenital hypoplasia of the muscular coats of the arteries. Quite recently I had an opportunity of testing the value of the drug in a case of severe haemorrhage following the removal of naso-pharyngeal adenoid vegetations in a boy, aged 10, who happened to be a haemophilic. The fact that the patient was a haemophilic was unknown to the parents and to myself. The operation was performed under chloroform anaesthesia and with a Gottstein's curette, the patient's head hanging over the end of the table. The amount of bleeding at the time of operation was comparatively slight, but about twenty hours after the operation the boy vomited several clots of blood of a peculiarly pale colour. Examination revealed a constant though slow oozing of a pale pinkish fluid from the naso-pharynx along the posterior pharyngeal wall. The nose was syringed with iced water and a hypodermic injection of ergotine given. The oozing, however, continued, and on the following day the naso-pharynx was packed with an iodoform gauze plug. Despite the tight packing the constant oozing continued, and the boy became pale and blanched. The plug was removed and another soaked in turpentine introduced, with, however, no better result. Finally a plug of gauze soaked in a solution of suprarenal extract was tightly packed into the naso-pharynx. No further haemorrhage ensued, and the patient made a good although somewhat slow recovery.

I think it right to record this case in the event of some confrère finding himself unexpectedly confronted with naso-pharyngeal haemorrhage in a patient who turns out to be a haemophilic.

Manchester.

WILLIAM MILLIGAN.

THREE CASES OF IMPERFORATE ANUS AND RECTUM.

THE relative infrequency of congenital defects of the rectum and anus prompts me to report the following cases, which came under my observation and treatment in 1895.

Keating, quoting Ball, says: "In a joint collection of 66,654 deliveries in Vienna and Dublin Lying-in Hospitals there were only 3 cases of imperforate rectum."

CASE I.—I was called at 11 o'clock one night to see an infant (female), aged 24 hours, and on my arrival at the house found a midwife busy giving it injections of soap and water, but "still it could get no passage." There was a well-formed anus, and, on passing my finger three-quarters of an inch into it, I found a very dense membrane occluding the passage. I opened it by a crucial incision, much to the relief of the child, and instructed the mother and nurses how to keep it dilated by passing the finger, well oiled, into the part. I saw the child some time after, and it was doing well.

CASE II.—In the second case, which was also a midwife's, there was a very fine and delicate membrane closing the external aperture of the anus. The child had been born the evening before, and no faeces had passed. The membrane was easily torn by a pair of dressing forceps, and the mother was instructed to keep it dilated.

CASE III.—I was informed by the nurse that the child had been born sixteen hours before, and had no anus. On examining the perineum there was a well-marked raphé and considerable bulging when the child strained or cried, but no indication of an anus. Under chloroform, which was administered by Dr. A. G. Newell, I made an incision from the centre of the raphé to the coccyx, and felt the rectum bulging downwards. By a blunt dissection for an inch through cellular tissue I found the rectum ending in a blind pouch. Gently pulling it down, I incised it by transfixion antero-posteriorly, and sutured the end of the bowel to the skin. The sutures held, the child made a good recovery, and had full control over its motions.

The infants were all well nourished, and were doing well when I heard of them last.

JAMES LAURIE, M.B., C.M.,
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