

small pieces of the growth was thus washed out. The indiarubber tube was introduced as before.

26th.—There has been a great deal of hæmorrhage from the bladder. The fluid which was passed looked as if it consisted of nearly pure blood. Drachm-doses of the liquid extract of ergot were given every four hours, and after three doses the hæmorrhage nearly ceased; half-drachm doses were then administered, but were discontinued on the 27th, as the hæmorrhage had entirely ceased.

28th.—The patient feels quite comfortable, but somewhat weak. The urine is thick, ropy, and about one-eighth pus.

Feb. 2nd.—Mr. Morris made a digital examination of the bladder, the patient being under the influence of an anæsthetic, and found that the ligature had disappeared and that the parts were healthy. The tube was ordered to be discontinued.—6th: Patient has improved in health and appearance, and expresses himself as quite well. Most of the urine passes through the penis and the patient has complete control over the vesical sphincter, although he experiences some frequency of micturition, about every four hours during the day, rather more frequently at night. The urine is still thick and ropy, and contains about one-eighth of pus. Bladder ordered to be washed out daily through a large-sized gum-elastic catheter (No. 11 was used) with Condy's fluid, and a mixture containing quinine, citrate of potash, tincture of hyoscyamus and mucilage to be taken three times a day. Wound in the perineum looks quiet and healthy.—13th: Urine does not contain more than one-twentieth of pus, is much less viscid and ropy. Irrigation of bladder continued. Fistula in perineum touched with nitrate of silver. A little urine still continues to pass through it. Patient allowed to get up on the 18th.—21st: Patient having taken a slight chill, it was noticed that the pus in the urine had greatly increased. Irrigation of bladder continued. Fistula nearly healed.—26th: Urine contains hardly any pus. Fistula quite healed. Left hospital for convalescent home.

March 21st.—Came to hospital, after spending three weeks at seaside, and states that he feels perfectly well and is quite relieved of all his former troubles.

The tumour removed was about three-quarters of an ounce in weight, and its microscopical characters were similar to those of an ordinary villous growth of the bladder. Mr. Karop, who examined it, reports: "It consists of thin folded lamellæ of almost structureless membrane, richly covered by transitional epithelium, and containing large vessels with only the barest trace of a proper wall."

Remarks.—The case is of great interest, chiefly as suggesting the occasional advantage, when dealing with bladder tumours, of separating the stages of the operation—namely, of opening the bladder and waiting for the expulsive efforts of the contracted bladder to expel the free extremity of the growth through the wound, then after a day or two to complete the removal in the manner adopted in this case. Such a course, when practicable, is more safe and more accurate than crushing off the growth with the lithotrite or Thompson's forceps. When the tumour is of the papillomatous character, it is probable that in no inconsiderable proportion of cases its expulsion may be looked for. In the female bladder the free ends of papillomatous growths are often floated outwards to and beyond the external urinary meatus. The previous formation and removal of a prostatic calculus supports the theory referred to by Sir Henry Thompson, "that papilloma may sometimes arise from local sources of irritation affecting a mucous membrane."¹

LEICESTER INFIRMARY.

EPITHELIOMA OF THE PENIS REMOVED BY PEARCE GOULD'S OPERATION.

(Under the care of Mr. J. ST. THOMAS CLARKE.)

FOR the following notes we are indebted to Mr. Bryan, dresser.

David K—, aged forty-eight, a stout man and a framesmith, presented himself for admission on Oct. 2nd, 1883, suffering from a swollen penis, tight phimosis, occasional free hæmorrhage, and foul sanious discharge from under the constricted prepuce. Some slight induration was found in the inguinal glands. Though the man denied any syphilitic history, he was put on anti-syphilitic remedies for a few days. As no improvement resulted, he was examined under ether,

and the prepuce slit up on Oct. 10th, when a large foul ulcer of an apparently epitheliomatous character was discovered, involving great part of the dorsum of the glans, with extreme hardness and widening as it were of the corpora cavernosa. The corpus spongiosum beyond the glans seemed in the main affected. It was ascertained that the patient had always had phimosis. Two years ago he first noticed a slight discharge from the end of the penis. This caused him no inconvenience. Six months later while micturating he noticed that he passed some blood. After that he bled profusely at irregular intervals, and independently of micturition. He had been a strong healthy man, but his health was now much below par, and he looked ill. As the question of removing the penis at the root by the old operation had not been mentioned to him, nothing further was done on this occasion. The parts were dressed with carbolic lotion, and the necessity of removal of the organ was afterwards pointed out to the man, though the result was stated to be unpromising. This was because the infiltration of the corpora cavernosa so markedly extended to the whole length of the penis. The man declined the operation, so, after a few weeks' sojourn till the parts assumed a chronic condition, free from inflammatory action, which had been most persistent since the slitting up, he left the hospital. Mr. Bond, the house-surgeon, about this time drew attention to the operation performed by Mr. Pearce Gould of the Westminster Hospital in a similar case,¹ which had proved a success, and which consisted of extirpation of the penis at the roots of the corpora cavernosa at their attachment to the rami of the ischium, and fixing the urethra to the perineum. As the man came again on Nov. 27th for further examination, Mr. Clarke proposed this operation to him as the only method of dealing satisfactorily with his disease, and he now gave a ready assent to it.

On Nov. 29th the patient was put under ether and placed in the lithotomy position. As recommended, the scrotum was first divided into its two halves along the line of the raphe from the root of the penis to the perineum, the dissection going right down to the corpus spongiosum, in which a full-sized catheter had been placed. The catheter was now pushed as far as the triangular ligament, the corpus spongiosum pulled forwards and cautiously separated by dissection or manipulation from the body of the penis. The catheter being drawn out, the corpus spongiosum was cut across and its deeper portion detached as far as the triangular ligament. Next the incision and dissection round the upper part of the root of the penis was effected, the suspensory ligament cut through, and the penis wholly detached except at the crura. The bleeding at this stage had become rather troublesome. The two crura were now attacked in succession by a periosteum elevator and the knife, but from their depth gave considerable trouble and hard work to get them away; while the hæmorrhage was very difficult to arrest, some deep arteries, probably those of the corpora cavernosa, being only secured after much patience. The attachment of the crura to the inner margin of the rami made their removal more complicated, and there seemed no little risk of the knife slipping and perforating the deep parts of the pelvis. The organ being now wholly removed, attention was turned to the corpus spongiosum. This was found unfortunately to have a widish rent in it, probably done by a retractor during the deep dissection, for great care had been taken to avoid any injury to it by keeping the point of the knife always away from it. The laceration being on the upper surface, it was stitched together as well as possible, and the end of the corpus spongiosum slit up for about half an inch, and the edges of this cut were sewn to the back part of the skin wound immediately behind the scrotum. The two halves of the scrotum were now brought together and stitched up, a drainage-tube being placed in the deep part, and the ends brought out in this case above and below. A soft catheter was left in the urethra as far as it would go, though it did not apparently enter the bladder. Had it not been for the laceration no catheter would have been required. The patient rallied fairly from the shock of the operation. His temperature in the evening was 101°, next three days about 102°, then 101°, 103°, and variations for fourteen days, when it fell below 100°. Recurrent hæmorrhage took place on the day after the operation, and the lower part of the wound had to be reopened and the bleeding stopped by compression by small steel clips, which were removed on the following day. The catheter was

¹ Med. Chir. Trans., vol. lxxvi., p. 363.

¹ Vide THE LANCET, May 20th, 1882.

used for three or four days; but, difficulty arising in its introduction, it had to be discontinued, and the man passed his urine as well as he could through the lowest part of the wound. The upper and front part of the wound healed readily, but there was great oedema of the scrotum for a fortnight, and the lower part of the wound adjoining the urethra sloughed. On the ninth day he had a rigor and the next day more hæmorrhage, so he was put under ether and re-examined, and a large slough, probably the torn end of the urethra, removed. After the removal of this slough the parts soon improved, and the patient went on gradually to convalescence and complete healing of the wound. This was greatly promoted by the assiduity of Mr. Bond, the house-surgeon, throughout the case. At this date the patient passes a good stream of water through his perineum, the opening being free from any inflammation, and about the size of a pea. He has gained flesh to a marked degree, and is now, thirteen weeks since the operation, quite well. The hardness in the inguinal glands is really not so marked as it was, and the improvement in the general health seems to indicate the absence of implication in the pelvic or lumbar glands. The sloughing of the urethra, following the laceration, has not so far led to stricture or other bad result. The patient's scrotum has a long median cicatrix corresponding to the raphe. He was exhibited at the Leicester Medical Society at the beginning of March.

Of the great value of the operation in removing epithelioma of the penis there can be no doubt, and Mr. Pearce Gould is to be congratulated on what appears to be a real advance in the surgery of this organ for extirpating that disease.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Increase of Cancer in England and Wales.—Epiphysitis.

THE ordinary meeting of this Society was held on Tuesday last, Dr. George Johnson, F.R.S., President, in the chair. Mr. Macnamara's paper received keen criticism.

Mr. F. B. JESSETT read a paper entitled an Inquiry into the Cause of the Increase of Cancer in England and Wales. The author regards the increased death-rate from cancer, to which attention has been drawn by the Registrar-General in his last annual report, as signifying a positive increase in the prevalence of cancer, rather than as being open to explanation on the ground of greater accuracy of diagnosis, as suggested in the report. On examination of the statistics for ten years, the increase is found to be from 9,945 deaths registered in 1872 to 13,542 deaths in 1881, or, taking the death-rate, from 431 per 1,000,000 in 1872 to 520 in 1881. On analysis of the Registrar's returns for the different counties, the death-rate from cancer in the fen districts is seen to be much higher than elsewhere, with the exception of London, Devon, Somerset, Gloucester, and North Wales, which places the author would exclude from account on special grounds. Cancer is more rife in low-lying, damp situations; but heredity, increased by intermarriage, has probably much to say to its prevalence in the "cancer district," the fen counties above alluded to. The increasing mental strain in the struggle for existence may tend to account for the increased development of cancer among persons predisposed, and these points must be borne in mind in advising those predisposed to the disease.—Dr. HERBERT SNOW could not entirely agree with Mr. Jessett; he thought that the Registrar-General's statistics on cancer were thoroughly vitiated from their having mixed up all cases of malignant disease as cancer. He considered that nervous influences were definitely at work in its production. Out of fifty-two ordinary patients, a family history of cancer was present in fourteen, or one in four. Cancer was a purely local disease. Heredity played but little part in its causation.—Mr. HARRISON CRIPPS referred to the falsity of the statistics obtained from the Registrar-General's reports. The hereditary nature of cancer was based upon evidence derived from two sources: 1. That it is a matter of common notoriety that cancer runs in certain families. 2. Evidence founded upon certain statistical facts. The former class of evidence was hardly admissible from a scientific point of view. In regard to the second sort of evidence, it must be remarked that it was impossible to

understand how a man could inherit cancer from his uncles, aunts, or cousins; the necessity for excluding these was obvious. Further, the impossibility of knowing the number of these distant relatives, in order to form a table of comparison between a cancerous and a non-cancerous family, renders them useless for the present purpose. This objection cannot apply to a man's parents or grandparents; two of the former and four of the latter must be the invariable amount. An individual rarely knew the cause of death of his four grandparents. Out of 916 parents cancer occurred thirty times in the mother and seven times in the father, or a total of thirty-seven times. This gives one parent in every 24.8 who died from cancer. But a person has two parents, therefore the chance will be only that 12.4 that one of them died of the disease. These figures of Mr. Morrant Baker's table of Sir James Paget's cases were next compared with those derived from the register of St. Bartholomew's Hospital. From this source it appeared that there is a chance of 14 to 1 against a cancerous patient having a cancerous parent. Now, these statistics did not prove in any way the inheritance of cancer, and this question could only be answered by discovering the proportion of cancerous relatives belonging to those not cancerous. When the death-rate from cancer in the parents of cancer patients was compared with the death-rate from cancer in all persons in the kingdom dying above the age of twenty years it came out thus: In the ten years 1861 to 1870 in England and Wales 1,185,189 men died above the age of twenty years and 1,194,433 women; 24,845 men died of cancer and 56,854 women. Thus 81,699 deaths from cancer occurred out of 2,379,622, or one death in every 29.1, from cancer. By comparing these figures with those previously given, it was clear that amongst the parents of cancerous patients the death-rate from cancer was 1 in 24.8 (Paget), 1 in 28 (Cripps), and amongst the whole community over twenty years of age 1 in 29. The relative frequency of cancer in these sets differed so slightly that it might be regarded as accidental; so that it would seem that cancer in the parent in no way increased the liability of the offspring to suffer from the same disease.—Mr. JESSETT, in reply, still considered there was something in heredity as a cause of cancer. The presence of hospitals in towns situated on rivers which overflowed their banks probably explained the increase of cancer in towns having this situation. It was incomprehensible to him how cancer could arise spontaneously; mental worry might be a cause of the disease.

Mr. MACNAMARA read a paper on Epiphysitis. Syn.: Diffuse osteitis of children; osteo-mylitis during period of growth; suppurative periostitis; acute necrosis. This disease, fully described by M. Gosselin in the *Arch. Gén. de Méd.* for 1858, hardly recognised by English authorities, seems to exist independently of acute osteo-mylitis. In this paper epiphysitis of the tibia is alone referred to, and the author brings forward five cases of the disease in that bone, illustrating the various phases of the malady, and showing that it may run its course (a) without affecting either the ankle- or knee-joint; (b) that it may give rise: (1) to necrosis of the entire diaphysis, (2) to abscess of the bone, (3) to diffuse sclerosis and enlargement of the tibia. The disease consists in inflammation commencing at the line of junction of the diaphysis and epiphysal cartilage. From this line the inflammatory action extends along the soft structures contained in the cancellated tissue and Haversian system of the diaphysis, involving the contents of the medullary canal and the deep layers of the periosteum. In many cases the inflammatory action quickly leads to suppuration or to necrosis of the diaphysis; the diaphysis of the bone may thus be entirely destroyed without the epiphysis and neighbouring joints being affected. If arthritis occur, it is a secondary affection. Epiphysitis does not always lead to necrosis of the diaphysis. Early treatment often saves the bone, and the active changes in the bone may subside. If abscess be formed in the cancellated tissue of the bone, the surrounding osseous tissue undergoes a condensing osteitis. In other cases the inflamed diaphysis becomes simply sclerosed with increased periosteal growth. Symptoms: Two of the five cases brought forward were at first mistaken for articular rheumatism. The disease commences with great pain and swelling in the proximity of a joint and general pyrexia. The limb becomes much swollen and of a brawny hardness, abscesses form, and in many cases the necrosed diaphysis can be felt. Symptoms of septicæmia often follow. In other cases the disease subsides, and ultimately signs of local abscess or of diffuse