

likely to induce them than when taken on an empty stomach. Patient has noticed that they are far more readily excited immediately after breakfast than at any other period of the day. They are more readily induced, too, after an indigestible meal than at other times, but patient is quite clear that no amount of indigestible food *per se* will bring on an attack. The paroxysms, as a rule, last only three or four minutes, but occasionally from twenty minutes to half an hour. If they come on whilst he is walking they always continue till he stops. Patient finds that stimulants afford no relief. In the intervals between the attacks patient is perfectly well, and he feels that if he could only remain absolutely quiet the whole day long he would be quite free from pain. Practically, as he is obliged to be out and about, he has several attacks, on an average six or eight every day. At the time of coming under observation the seizures were rapidly increasing both in frequency and severity. His family history was fairly good. His father died at the age of eighty-three, and hardly had a day's illness in his life. His mother died of phthisis, but only, patient says, through catching cold, hers not being a consumptive family. He lost two brothers—one at the age of eighteen from consumption, and the other in the tropics, cause unknown. He has two brothers and one sister living, all well. There is no family history of gout, asthma, fits, heart disease, or sudden death. He has four children, one of whom (a boy) is consumptive, and another (a girl) subject to facial neuralgia. Patient is a bailiff by occupation, and is a remarkably intelligent man. He is a cool, clear-headed fellow, but little prone to talk of his sufferings, although they are at times very severe. He has travelled much, and has lived in Egypt, Turkey, Italy, and Greece. For the last thirty years he has been accustomed to lead an active out-door life, seldom walking less than fifteen miles a day, often very fast. He has, he says, done a great deal of hard work in the way of pleasure. He usually smokes about two ounces of birds-eye in the week, and has done so for years. His health has always been remarkably good, and, with the exception of rheumatism ten or twelve years ago, and pleurisy seven years ago, he has never known what it is to be laid up. He has never suffered from gout. On a physical examination it is noticed that there is some fibroid degeneration of the arteries, and there is slight hypertrophy of the left ventricle. There are no signs of valvular disease, and there is nothing to indicate the existence of aneurism. The urine was free from albumen.

There could be no possibility of doubt respecting the diagnosis. It was a typical uncomplicated case of angina pectoris.

Patient was placed for a week on infusion of quassia, in order that he might be observed, and also to eliminate the effects of expectation. It need hardly be said that he derived no benefit from this treatment. He was then ordered drop-doses of the one per cent. nitro-glycerine solution in half an ounce of water three times a day. At the expiration of a week he reported that there had been a very great improvement. The attacks had been considerably reduced in frequency, and for two or three days he had had only one attack—in the morning after breakfast. The attacks, when they did occur, were much less severe. He found, too, that a dose of medicine taken during an attack would cut it short. He had tried it several times, and it had always succeeded. It would not act instantly, but still very quickly; so that the attacks were considerably shortened. He was thoroughly convinced that the medicine had done him good, and said he was better than he had been since first he had the attacks. It was found that the nitro-glycerine, even in this small dose, had produced its physiological action. Patient complained that for two or three days he had experienced a strange fulness in his head, with a sense of pulsation. The pulsation was felt chiefly in the temples, but also across the forehead. It caused him no positive inconvenience, and he evidently had no suspicion that it was due to the medicine. The dose was then increased to three minims, and patient found that this gave him more speedy relief. On two days during the week he had no seizure at all—a most unusual circumstance. Patient had adopted the plan of carrying his medicine with him in a phial, and taking a dose if an attack seized him in the street. It never failed to afford relief. The beating had increased considerably in intensity, and was described as being a "kind of a pulse." Patient had discovered the fact that it was produced by the medicine. It came on immediately after each dose, and lasted about a quarter of

an hour. It was now experienced chiefly across the forehead. Patient continued steadily to improve, and the dose was gradually and cautiously increased. With the increase in dose the pulsation became more severe, lasting from twenty minutes to half an hour. When twelve minims were given every three hours it became a positive inconvenience.

On January 14th the dose of the nitro-glycerine solution was increased to fifteen minims every three hours. A few days later he had a "kind of a fit" immediately after having his medicine. The pulsation came on as usual, but was quickly followed by headache and pain at the back of the neck. His speech "began to go off," and he felt that he would have lost his senses had they not given him tea and brandy.

Patient took the fifteen-minim dose every three hours from the 14th to the 28th of January, but on the latter date had two "bad shocks." He took a dose of medicine in the morning as usual, and felt the customary pulsation, which passed off after about half an hour. An hour and a half later he experienced a sensation as if he would lose his senses. He did not fall, but had to catch hold of something to prevent himself from so doing. It did not last more than half a minute, and there was no pulsation with it. The other seizure occurred later in the day, and was of the same nature. Patient attributed these attacks to the medicine, and was in no way alarmed by them. He thought it advisable, however, to reduce the dose by a third, and henceforth had no return of the fits. At this time his anginal attacks were so thoroughly kept in check by the nitro-glycerine that they gave him comparatively little inconvenience. He always carried his bottle of medicine with him, and immediately on experiencing the slightest threatening of an attack he took a sip. Relief was certain, for even when it did not at once cut short the attack it eased the pain so considerably that he was able to go on walking. For two months longer he continued the ten-minim dose, sometimes taking a little more, and sometimes a little less. He preferred taking it occasionally, as he thought it might be necessary to take it regularly. For the last eight months he has taken nothing but cod-liver oil, and sometimes tonics, and has not had a single attack. He attends once or twice a month, but is perfectly well. He can walk and get about as well as ever he could.

(To be concluded.)

## EPITHELIOMA IN KASHMIR.

By THEODORE MAXWELL,

M.D. CAMB., B.SC. LOND., F.R.C.S. ED.

With Remarks by

A. PEARCE GOULD, M.S., F.R.C.S.,

ASSISTANT-SURGEON TO THE WESTMINSTER HOSPITAL.

HAVING been engaged during the summer seasons of 1874-5 in medical mission work in the valley of Kashmir, I was much struck, as my predecessor, Dr. Elmslie, had been, with the frequency of epithelioma, and the peculiar situations in which it occurs on the bodies of the natives. A short account of these singular growths, and the various points in which they resemble and differ from European epitheliomata, as well as of the cause from which they seem to arise, may perhaps be interesting.

To give an idea of the frequency of epithelioma in Kashmir, as compared with it in other parts of India and in Europe, I may say that in the Vienna Hospital, in 1873, of 22,049 patients, 86 were cases of epithelioma, or '039 per cent.; in the Lahore Hospital, in 1873, of 22,123 patients, there were 11 cases of malignant tumours, or '007 per cent.; whereas in the Kashmir Mission Dispensary, in 1874-5, of 3924 patients, there were 49 cases of epithelioma, or 1·24 per cent.—a proportion more than thirty times as great as in Vienna, and 117 times as great as in Lahore, where all malignant tumours are reckoned together.

In Europe, and I believe in India as well, the most common seats of epithelioma are the lip, tongue, mouth, scrotum, and penis. Thus, taking 220 cases from recent reports of various hospitals in London and the Imperial Hospital of

Vienna,—111, or more than 50 per cent., occurred on the face; 22, or nearly 23·2 per cent., on the tongue; 14, or 6·3 per cent., on the penis; 10, or 4·54 per cent., on the scrotum; but not one on the abdomen or thighs, though it is not unknown in these situations.

Now in Kashmir the great majority of the cases occur on the abdomen and thighs. Taking Dr. Elmslie's 20 recorded cases, and 34 of my own of which I have a record of situation, or 54 in all,—27, or 50 per cent., were on the abdomen; 15, or 27·7 per cent., on the thigh; 2, or 3·7 per cent., on the lower part of the leg; and one each on the lip, tongue, male mamma, forearm, elbow, finger, hand, scrotum, stump of foot after frost-bite, and sole of foot. In the abdominal cases the umbilicus is very rarely involved. I have never seen the penis affected. I should remark that the Kashmiris are mostly Mussulmans, and therefore circumcised.

The epitheliomas usually presented the appearances of irregular, nearly circular or oval ulcers, from the size of sixpence to that of a crown, with everted indurated edges, an irregular, coarsely-granular base, of a yellowish or brick-red colour, discharging a little purulent or sanguino-purulent fluid, which, on microscopic examination, was sometimes found to contain characteristic nests or globes of epithelial cells. By pressure or irritation the base could be made to bleed easily, but not profusely. The growth was invariably easily movable over the deeper parts, and was not very tender to the touch. The induration generally extended to about a quarter of an inch outside the edge, and the skin was usually of a dull purple hue up to this limit. The pain complained of varied greatly, in some cases being very slight, and in others severe, and was always described as "like the pricking of needles."

The growth of the tumours was certainly slow. I find that the average time they had been noticed before I saw them was about a year and a half. One thigh case, which was only about two inches in diameter, was said to have existed eight years, and I found when excising it that it had penetrated more deeply than any other, having involved the fascia lata and the adductor muscles.

As to the termination of cases not interfered with, I am unable to give any information, never having heard more than vague rumours of death having resulted from these tumours. The native hakims do not attempt to cure them.

These growths are, to say the least, much less malignant than European epitheliomas. They have been excised by my predecessors in the medical mission, Dr. Elmslie and the Rev. W. T. Storrs, M.R.C.S., and myself from 1865 to 1875, and neither Mr. Storrs nor I ever saw a recurrence of either Dr. Elmslie's cases or of our own. In connexion with this it is interesting to note that the lymphatic glands are rarely affected. I never knew them cancerous, and very seldom enlarged. Mr. Storrs also tells me he never remembers seeing them even enlarged.

Age appears to have much the same influence as in Europe. I do not think I saw any in persons under thirty. The majority were certainly in those over forty. Dr. Elmslie, however, saw one in a child of three.

As in Europe, the male sex is affected much more commonly than the female. Lane<sup>1</sup> gives the ratio as 86 males to 19 females—that is, the male cases are 82 per cent. of the whole. From Dr. Elmslie's statistics and my own I find that in Kashmir the male cases were 85·2 per cent. of the whole.

As will be seen later on, the peculiar habit to which I believe the existence of Kashmiri epitheliomas is due is indulged in as much by women as by men, but still we have apparently almost exactly the same ratio between the susceptibility of the sexes to the disease that exists in Europe, where it is usually thought to be accounted for by the greater sources of irritation to which the male sex is liable, such as that of the short clay pipe on the lip, and the soot-impregnated trousers of chimney-sweeps on the scrotum.

I regret that I can give no information on the influence of heredity in Kashmiri epitheliomas.

The vale of Kashmir is just the place to form what Haviland denominates a "cancer field," being an alluvial plain drained by a considerable river—the Jhelum,—and with a damp relaxing climate. Haviland does not distinguish between the different forms of cancer, and I do not feel sure whether he means to include epithelioma or not.

At all events, this is the only form which is at all common in Kashmir, and I am certain that its existence is in a very slight degree, if at all, attributable to climatic influences.

The Kashmiris are, physically speaking, a fine race. They live almost entirely on rice, but are capable of continued muscular exertion. Their habits are uncleanly, and they suffer from syphilis, scrofula, lupus, and chronic rheumatism. I have often seen leucodermic patches on the skin of the trunk and thighs; these patches were generally somewhat unæsthetic, but I never saw an epithelioma on or near one. Simple tumours are not specially common, and I do not remember ever to have seen a wart.

The coldness of the Kashmiri winter, and the want of a sufficiency of warm clothing, have led to the adoption of a curious habit by the natives. Every Kashmiri—man, woman, or child—carries about with him or her a kángri, or fire-pot. These kángris consist of clay pots, about four inches in diameter, encased in wickerwork, and with basket handles. They contain live charcoal or wood ashes, and are usually carried inside the nightgown-shaped garment, which both men and women wear, and are often in contact with the skin of the abdomen. When the wearer sits, or rather squats, he holds the kángri between the thighs and the abdomen, and perhaps blows up the charcoal through a slit in his garment. It not uncommonly happens that part of the wickerwork wears off the heated clay vessel, which, if carelessly held, may severely burn the skin of the abdomen or thigh. Here we have, I believe, a sufficient explanation of the frequency and peculiar situation of epithelioma in Kashmir. I found upon inquiry that very many of the sores had to the patient's knowledge originated in burns from the kángri. The abdomen of nearly every Kashmiri is mottled or seamed with the cicatrices of burns, or at least the marks of constant irritation by the heated surface of the kángri. It is interesting to remark the analogy between the heated clay-pipe causing epithelioma on the lip in Europe and the heated clay kángri causing the same disease on the abdomen of the Kashmiris. The thigh is less frequently burnt, partly because the kángri is only in contact with it when the wearer is in a squatting posture, partly probably because the pyjamas or drawers afford some protection to this region. As I have already stated, epithelioma is more common on the abdomen than the thigh, in the proportion of 27 to 15.

Woolwich.

*Remarks by Mr. A. PEARCE GOULD.*—Dr. Maxwell has been kind enough to allow me to examine some of the tumours he removed in Kashmir. When I saw them, after several months' preservation in spirit, they appeared as ulcers with indurated, raised, everted edges, and granular hard bases; in no specimen that I saw was there any fungating mass or process springing from them. On section, the new growth, to the naked eye, extended to a distance of one-eighth to one-fourth of an inch. Owing to an unfortunate accident to the specimens, I have not been able to make as complete an examination as I hoped to have done; but I have examined several sections taken from the edge or base of the ulcers, and have found the appearances presented to be those characteristic of epithelioma. Masses of epithelial cells, containing in every case more or less well-formed and numerous "globes épidermiques," are seen extending into the tissues beneath, which are infiltrated with small round cells—leucocytes. The epidermic cells vary in size in different specimens; in some they are very large, but in most they are smaller than is common in epithelioma of the lip and penis.

One special interest attaching to these cases is their supposed cause. Epithelioma arising in connexion with the scar of a burn or scald is by no means unknown in this country. Mr. Hulke mentioned such a case at a recent discussion at the Pathological Society, and when I was surgical registrar at University College Hospital, there was under Mr. B. Hill's care a woman with a large epitheliomatous growth on the thigh in the site of a scar from a burn received many years before. Their great frequency in Kashmir appears to depend upon the fact that the scars, when healed, are being constantly scorched, if not actually burnt, by the "kángri." It is quite in accord with well-received doctrines to accept epithelioma as resulting from such conditions. But these cases have a higher interest and importance, and particularly at the present time, when the relation of rodent ulcer to epithelioma is under discussion; for they help to fill up the gap between the instances of these diseases commonly met with in this country. They differ from rodent

<sup>1</sup> Cooper's Surgical Dictionary.

ulcers in their position, rough, readily bleeding surface, and everted raised edge. They resemble rodent ulcers in their slow growth, curability by complete and wide removal, and the non-infection of the lymphatics.

They differ from common epitheliomata in their position, small amount of new growth, and general benignity, but they distinctly resemble them in microscopical appearances, in most of the naked-eye characters of the sores, in arising from oft-repeated irritation, particularly at the line of union of dissimilar epithelial tissues, in the sex they most often affect, and the age at which they appear. It is well worthy of note that although both sexes are equally exposed to the alleged cause of these growths, the male sex is so much more frequently attacked than the female.

There are one or two points on which it will be interesting to get further information. Do these growths start at the edge of the scars, or do they arise in cicatrices in which there are no hair-follicles, no glands of any description? Is their growth more rapid, and are they at all apt to affect the lymphatic glands, when they spread from a dense scar with few lymph-channels to pliant softer skin with abundant lymphatics? Are the growths ever multiple? If Dr. Maxwell's explanation be the correct one, we should expect to see several primary growths where the abdomen is "seamed with cicatrices."

Gower-street.

## LITHOTOMY, FOR REMOVAL OF A LARGE PHOSPHATIC CALCULUS,

THE NUCLEUS OF WHICH WAS A BONE PEN-HOLDER, WHICH HAD BEEN TWO YEARS IN THE BLADDER.

By JOHN LOWE, M.D.

A. B—, aged nineteen, a tall, well-built young man, was seen on Feb. 6th, 1878, in consultation with Mr. Love, who suspected the presence of stone in the bladder. It appeared that he had suffered on several occasions from "stoppage of water" more than two years ago. (His father and brother have also been subject to gravel.) In order to "relieve" himself, he had on several occasions passed into the urethra a bone pen-holder. The last time he used it, two years ago, it escaped from his grasp and passed into the bladder. He says that he experienced no inconvenience from its presence there until two or three months afterwards, when he was seized with pain in the loins, accompanied with bloody urine, violent straining with protrusion of the bowel, and incontinence of urine. These symptoms were relieved by treatment, and he continued fairly well for a year and a half, "with the exception of occasional pain." No mention was made of the foreign body until after my visit. About six weeks ago he had a return of suffering: great pain in passing water, which was loaded with ropy mucus; there was complete incontinence of urine, and the effort to micturate caused action of the bowels. At the time of my visit the chamber utensil was half filled with tenacious mucus.

On passing a sound, I immediately detected a large calculus. As the patient was becoming exhausted, it was clearly necessary to operate as early as possible.

A few days subsequently, assisted by Messrs. Love, Walford, and Newmarsh, I performed lateral lithotomy, the patient being under the influence of chloroform. A free external incision having been made, and the neck of the bladder incised, the pen-holder was felt lying behind the prostate gland. The finger was passed under it, but it was so firmly imbedded that it could not be raised until I had made a lateral incision through the gland, when it was readily brought into view and seized by the forceps. As the stone which surrounded it was large, attempts were made to dilate the orifice into the bladder before proceeding to extract; but the parts were so indurated and surrounded by effused lymph that very little dilatation could be effected, and it was found necessary to divide the prostate on the other side also. Even thus but little progress was made; but fortunately, after one or two attempts at extraction, the pen-holder was drawn through the stone, which was now easily grasped by the forceps, and steady attempts at extraction made. The separation of the handles of the forceps showed that the stone was between three and four inches in diameter, and the mark on the pen-

holder confirmed this. While the process of dilating was going on the stone broke, and the pieces were then easily removed and the bladder well syringed. Very little blood was lost in the operation, and there was no subsequent oozing.

The patient passed a good night. He made an excellent recovery, and continues well to the present time. The pulse and temperature, when I saw him on the third day after the operation, were normal. On the sixth day urine passed by the urethra.

The pen-holder was of bone, and measured four inches in length.

King's Lynn, Norfolk.

## A Mirror

OF

## HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

### KING'S COLLEGE HOSPITAL.

LARGE TUMOUR OF THE THIGH; REMOVAL, WITH ANTISEPTIC PRECAUTIONS; RECOVERY.

(Under the care of Mr. HENRY SMITH.)

E. T—, aged forty, married, was admitted into Wigram ward on Sept. 16th, 1878, with a large tumour of the right thigh. The previous history and the family history were good. She had four healthy children. During her last pregnancy, five years ago, she noticed a small, ill-defined "lump" in the inner and upper part of the right popliteal space, elastic to the feel and movable. For four years the growth of the tumour was gradual and painless, but during the last twelve months it more than doubled in size. There was no history of injury to the limb. She had lost flesh.

On admission she was fairly nourished, but anæmic. There was a large tumour situated on the inner and posterior surface of the right thigh, extending downwards into the popliteal space, and upwards as far as the upper third of the thigh. The skin over the tumour was healthy, and not adherent. On putting the muscles into action, they could be seen to pass over the growth. The surface of the tumour was irregular and ill-defined, somewhat elastic and nodular. No fluctuation could be made out. The mass could be moved slightly laterally, but not up and down. It was painless on handling. Its attachment could not be made out, nor could the femoral vessels be detected. There was no bruit over the growth. The superficial veins were distended. The inguinal glands were not enlarged, and the movements of the knee-joint were unaffected. The patient could walk, suffering inconvenience only from the size of the tumour. The right thigh measured 19½ in. round the tumour, being 6½ in. larger than the corresponding measurement of the other limb. The heart and lungs were healthy. The appetite was bad, and the bowels were irregular. Urine normal. Ordered twenty grains of tartrate of iron in water three times a day.

During her stay in the hospital, the general health improved, but the tumour increased about an inch in circumference.

On October 5th, the patient having been placed under the influence of an anæsthetic, an incision ten inches long, parallel to the saphena vein, was made through the skin down to the muscles. The muscles were then divided to a like extent, and the growth, which was encapsuled, exposed. After the first free incision, it was mainly removed by tearing it from the surrounding tissues, the point of the knife being only occasionally used to assist. A few bleeding points were ligatured, a drainage-tube with lateral openings was inserted, and the skin drawn together by numerous stitches. The dressings were then adjusted. The operation was performed antiseptically, with the strictest precautions. Great caution was necessary in manipulating the posterior and lower part of the growth, for the lower part of