below the ribs, which was slightly tender to the touch, but not in itself painful.

He applied to a medical man, who blistered him and gave mercury, but the tumour continued to grow, and at last attained such a size as to interfere with his employment. He came to England for advice about one year ago, has followed no occupation since, and the tumour has grown more rapidly than it did before. The pain was not very severe, but about four months previous to his admission, it was so great that he could not move in bed.

On examination, an enormous tumour was found in the epigastric, the left and right hypochondriac regions, reaching down as far as the umbilicus; just below the ribs is a prominence, which gives an indication of fluctuation; in other parts the tumour is hard and resisting to the touch; and below, its termination can be distinctly felt. The rectus and the other abdominal muscles may be seen acting over it; the ribs and ensiform cartilage are everted by the pressure upwards. Respiratory murmur deficient over the base of the right lung, probably from displacement of the liver; sounds of the heart normal, but heard more towards the mesial line than natural; breath short, and oppression after meals; bowels confined; urine free and natural. There is no bruit in the tumour, but it evinces an impulse with each systole of the ventricle. The patient is restless, and cannot lie on his back.

On the third day after admission the tumour was tapped in its most prominent part with a trocar; no fluid, but some pus, was obtained by the cupping-glass, in which the microscope showed the presence of a claw or member of the *Echinococcus hominis*. On the sixth day there was shivering and loss of appetite. On the ninth day the swelling was larger, and there was evidence, by percussion, that air was contained in it. The distress required opium at night. On the tenth day extensive superficial redness came on, as well as a little oedema where the puncture was made, and the veins were well marked. Pericardial friction-sound, pointing to pericarditis. The symptoms became so urgent, that Mr. Hilton made a vertical incision, three-quarters of an inch in extent, over and down to the cyst, and then introduced a large trocar and canula. A quantity of offensive gas issued, but nothing more until the canula was withdrawn, when a number of hydatid cysts, about the size of a marble, came rolling out. The patient's abdomen had been previously strapped with adhesive plaster, and a plug of lint was now placed in the wound. Milk diet; brandy and soda-water.—Nine p.m.: On removing the plug a quantity of hydatids again issued. On the next day more hydatids were obtained; pulse 128, small and compressible; respiration 51; patient anxious and distressed; pain in the thorax and shoulders; pericardial friction-sound more diffused and audible; perspiration and restlessness. Mr. Hilton prescribed mercury, quinine, and a blister over the region of the heart. More hydatids came away on the same day, and were of an exceedingly offensive character.

On the fifth day after the operation, about a pint and a half of purulent matter and hydatids were procured from the cyst; these were very offensive, and of a yellowish colour, from the presence of bile, as proved by becoming of a pink colour with nitric acid, and of a deep-red with sulphuric acid and sugar. The patient lingered for a few days, and died on the nineteenth day after admission, and the tenth after the opening of the cyst.

The post-mortem examination presented the following appearances:—On removing the integuments, a slight collection of pus was found in the cellular tissue in front of sternum; pus was likewise discovered in the anterior mediastinum, which communicated with the opening in the cyst through one of those small spaces behind the sternum where the diaphragm is deficient. Heart adherent to the pericardium by recent adhesions; valves healthy. Lungs congested; no pneumonia, but capillary bronchitis. Peritoneum healthy; kidneys coarse and congested; spleen normal. Liver perfectly healthy in structure, but the left lobe was almost completely obliterated by the hydatid cyst which seemed to have sprung up within the hepatic substance, and pushed outwards.

The cyst was nearly the size of a man's head, its walls thick and suppurating, and in the interior were contained an immense number of hydatids in a very offensive condition, varying in size from that of an orange to that of a millet-seed. Some of these were opaque, others translucent, but all flaccid. The hydatid cavity was situated in front of the stomach and lesser omentum, and extended to the right as far as the pylorus, the anterior wall of the viscus being attached to the posterior wall of the sac. The duodenum, hepatic duct, and vessels, were not implicated or disturbed, but the transverse

colon was pushed down, and its upper wall firmly connected over a small extent with the inferior part of the cyst. The rectus and other abdominal muscles in front of the cyst were atrophied.

Our readers will at once perceive that the preceding case presents the peculiarity of an hydatid cyst springing up in the substance of the *left* lobe of the liver, whereas the general rule is, that such affections invade the *right* lobe. They will likewise ask themselves whether the fall on the left side of the chest, and the continual pressure on the epigastrium from gun-boring, had anything to do with the formation of the cyst. These were certainly exciting causes, but they had doubtless more power over a debilitated or intemperate subject than with people in the opposite circumstances. Had the disease not been of such long standing, and the patient in better condition, the evacuation of the parasites might have been followed by a contraction of the cyst and an ultimate cure, as such results have been obtained in cases upon record. As to the prophylaxis, we beg to refer to the following passage of Dr. Copland's Dictionary.

"We may consider as axioms in pathology and therapeutics that parasites form, increase, and multiply in proportion as the parent becomes weakened, and as the secretions and excretions accumulate or are retained, and that they diminish and ultimately disappear, with the full restoration of the vital power, and of the secreting and excreting functions of the animal which produced them."

LONDON HOSPITAL.

Cases of Encephaloid Disease of the Lower End of the Radius.

(Under the care of Mr. LUKE and Mr. ADAMS.)

We have lately had several opportunities of recording cases of medullary disease of bone, the parts of the osseous system affected being chiefly the femur, or the superior maxilla. Tumours of this nature seem to spring up more rarely in the upper extremity; we therefore beg to direct attention to the following cases, which were lately treated in the London Hospital.

CASE 1.—Sarah G—, aged forty-four, of light complexion and nervous temperament, following the occupation of cook in a gentleman's family, was admitted under the care of Mr. Luke, Jan. 14, 1851. Both her parents are dead: the father died in consequence of mental affliction, and the mother in childhood; no trace of malignant disease has ever been noticed among her brothers and sisters. The patient has been married twice, and is now a widow, without ever having had any children. The menstrual functions were always regularly performed, and have not yet ceased.

Fifteen months ago, whilst moving a chest of drawers, her right hand was forcibly bent backwards, the dorsum almost coming in contact with the forearm. This accident gave her much pain in the wrist; the inflammation ran very high, without much cutaneous discoloration, but was at length subdued by the ordinary means. The joint, however, remained weak, though not the seat of much pain; she used a great variety of embrocations, but to very little purpose. Within the last six months, she perceived an enlargement on the lower end of the forearm; it increased very slowly, and occasioned a pain which she described as gnawing and aching.

About three months ago, whilst using her right hand for cutting bread, she felt something snap and give way in the swelling; from that time she lost all power over the joint, and could not, as she stated, lift a wineglass with the corresponding hand. The pain now increased, and became more constant; the swelling grew larger, and she was induced to place herself under Mr. Luke's care.

On admission, the tumour was found situated on the posterior aspect of the forearm, just above the wrist: it was of the size of a flattened egg, tough, immovable, and somewhat sensible to pressure. The movements of the joint were lost; the pain was at times severe, and shot to the front of the wrist, though the axillary glands were unaffected. Taking the present state of the tumour and the history of the case into account, Mr. Luke considered the swelling a malignant growth of the bones of the forearm, and was wishing to make an exploring puncture into it, so as to ascertain, if possible, the actual nature of the growth. The patient was, however, extremely apprehensive of the simplest operative proceeding, and it took some time before she fully understood how necessary it was to her safety that the most decisive measures should be taken. Seeing clearly, at last, that the earlier the tumour was removed the more chance there was of the constitution escaping contamination, she consented to the ampu-

tation of the forearm, if Mr. Luke should judge this proceeding indispensable, after an exploring incision had been made in the theatre.

Mr. Luke being anxious that the diagnosis should rest on the most secure basis, requested the assistance of Mr. Quekett, the eminent microscopist. It was agreed that Mr. Quekett should be present in the operating theatre, that the tumour should be punctured, the substance obtained immediately examined under the microscope, and that if it were pronounced malignant, the forearm should be at once amputated. It will thus be seen that the indications obtained by the microscope were here taken advantage of in a very appropriate manner, and it is clear that the instrument, thus used, is likely to render incalculable service. On this head we cannot refrain from quoting a passage from Mr. Guthrie's lecture, delivered before the Medical Society of London, (*THE LANCET*, Feb. 15, 1851, p. 173,) and which bears very forcibly on this subject.

"The microscope in the hands of Mr. Quekett discloses the nature of the diseased as well as the healthy structures. The secretion from a diseased part will often show the nature of the disease itself, and enable the surgeon to judge whether an operation may or may not be performed with a reasonable hope of success; whether it is necessary to do it or not; and the knowledge which Mr. Quekett has thus acquired is at the service of every member of the profession who stands in need of it, and cannot fail to be to them of the greatest advantage."

The patient was brought into the theatre on Feb. 13, when Mr. Luke proceeded to make an incision into the tumour, and some of its component particles being obtained, they were placed under the microscope, by Mr. Quekett, who found them composed of nucleated cells, some of which were of a circular, and others of an oval figure; the greater number were full of blastemic granular matter, so as, in the majority of cases, to obscure the nucleus. Some of the cells were as large again as others, and the granular matter, when out of the cells, exhibited a molecular movement. Mr. Quekett added, that in structure the present tumour resembled very much that which was lately removed by Mr. C. Gardiner Guthrie, (*THE LANCET*, Nov. 30, 1850, p. 603.)

There being now no doubt as to the malignant nature of the tumour, the patient was placed under the influence of chloroform, and Mr. Luke removed the forearm near the junction of the middle with the upper third by the double flap operation. There was some difficulty in the securing of the vessels, from a more than usual retraction of parts; the patient was, however, put to bed in a very favourable condition.

There was slight hæmorrhage on the next day, which was easily controlled, but it would appear that the effects of the chloroform did not in this case pass off as usual; during four days after the operation there was intense headache, heaviness, and wandering. These symptoms were combated by cold applications to the head, and finally subsided. The patient has since progressed very satisfactorily, in spite of a slight attack of erysipelas; she is now quite convalescent, and the stump almost cicatrized.

The pathological specimen was carefully examined, and on a section of the tumour and hand being made, it was found that the encephaloid growth had formed in the substance of the radius, just above the wrist. In its collapsed state it was about the size of a small apple, and presented the usual characters of encephaloid formations. The tumour was surrounded by a shell of bone, which was found to be an expansion of the cortical portion of the radius. The medullary canal of the bone presented a tolerably healthy aspect, and the ulna was quite free from disease. The joint was not implicated, and the tendons, vessels, and nerves of the part were pushed aside, but not involved in the disease.

This is the second case of the kind which has been under the care of Mr. Luke; the first patient was a man about forty-four years age, who presented a tumour in the same situation, and almost of the same nature, as in the case just reported. The growth, however, was found, after the amputation of the forearm, to have had its origin in the periosteum, and it is satisfactory to note that the operation was performed about a twelvemonth ago, and that the patient is now in good health.

The question which at once springs up in the practitioner's mind, in considering cases of the above description, is that regarding the recurrence of the disease. We are bound to state that Mr. Luke entertains the hope that the disease will not return; and if we judge from cases which have occurred in this hospital, it might be inferred that in certain instances morbid manifestations do not recur.

The late Mr. Headington, surgeon to the hospital, removed the leg of a woman whose tibia (which is now in the museum of the institution) was affected with encephaloid disease; twenty years after the operation the patient was quite well. Mr. Luke removed, several years ago, a tumour of a malignant character, connected with the scapula of a young girl. Three-fourths of the bone were taken off with the growth; the patient was seen fourteen years afterwards by Mr. Luke, and had not experienced any return of the disease.

It is but just that cases like the above should be placed in juxtaposition with those where the disease has reappeared. Mr. Stanley, in his valuable work on diseases of bones, states (p. 178),—"The disease (encephaloid of bone) is most probably always at first local, and continues so until the circulating fluids and constitution become affected; from the part in which the disease commences, some of the morbid matter passes into the bloodvessels and absorbents, and poisons the blood, and thus gives rise to the formation of secondary tumours in other parts of the body. If, therefore, the encephaloid tumour is removed before the blood has become poisoned, the disease will not return; but if the morbid matters have already entered the circulation, it will be produced in other parts of the body. According to these views the encephaloid tumour of bone should be removed as soon as possible."

SECOND CASE.

(Under the care of Mr. ADAMS.)

Elizabeth F—, aged twenty-seven years, a servant, of fair complexion, was admitted under the care of Mr. Adams, December 17, 1850. Her father and sister died of phthisis, and a brother from chronic abscess of the thigh; she began menstruating at fourteen, and has since been very regular in that respect. The patient's health has always been good, her food wholesome, and her work moderate.

Four years ago she began to feel a small lump just over the end of the radius, on the right side, without being able to ascribe its origin to any cause, except it were the forcible wringing of clothes. She likewise stated that she felt some numbness in the fingers before the tumour appeared; the latter gave her much pain, and remained for two years about the size of a nut, she continuing to follow her occupation. After this lapse of time it grew more quickly, and soon reached the size of a walnut, when it was opened by a surgeon. The patient could not point out the nature of the fluid which escaped; the wound healed up quickly, and the swelling steadily increased until she was induced to apply to this hospital.

On admission the tumour was found occupying the lower third of the forearm, for the whole of its anterior aspect; it projected about two inches from the bone, and formed a nodulated swelling, about the size of a large orange, tense in some points, yielding in others, and giving the sensation of fluid, or a soft substance. The lower portion, especially the nodules, were of a bluish colour, but the upper was lighter, the whole growth quite immovable, and some of the nodules seemed ready to burst. The patient can flex all the fingers, and extend them, except the middle and ring finger, but she cannot pronate the arm. The axillary glands are unaffected.

Mr. Adams, considering that the bones were attacked with malignant disease, proposed amputation of the forearm, which was performed, the patient being under the influence of chloroform. The wound healed very rapidly; the girl had no unfavourable symptoms whatsoever, and was discharged a few weeks after admission, the stump being completely cicatrized.

The tumour presented, on a longitudinal section being made, the usual characters of encephaloid growths; it reached from the ball of the thumb half way up the forearm, and lay on the bones without being connected with the wrist-joint. It was nodulated and firm, and seemed to have been originally of a cystic nature. It will be observed that the three cases of malignant tumour of the forearm which we have put upon record, although analogous in several respects, present this difference, that the first sprung from the substance of the bone; the second equally so, but with cystic formations, and the third was of a purely cystic nature, growing in the immediate vicinity of, but not connected with, the bone.

CHARING-CROSS HOSPITAL.

Excision of the Ankle-joint.

(Under the care of Mr. HANCOCK.)

Excision of joints is getting more and more in favour with metropolitan surgeons. On the 17th inst. an operation of this kind was performed by Mr. Hancock upon a boy about eight years of age. The patient was labouring under scrofulous