Of the mortality in the cases of primary amputation of the thigh, I need say little. Death, in each case, took place in three days at the farthest, and without any thorough rallying from the shock of the accident. The mode of amputation, or the treatment of the stump, can have little to do with the result.

The amputation of the arm and scapula was complicated with a laceration of the costal wall of the axilla, fracturing and exposing three of the ribs. The man died in twenty-four hours. The death in the arm amputation, as explained in the note, arose from causes unconnected with the operation. It is curious that, in this series, there are no shoulder-joint amputations. I published, in the *Liverpool Medical and Surgical Reports*, 1867, six cases which had occurred to me up to that time, and of which five recovered and one died.

When I was first appointed to the Hospital, twelve years ago, I found amputation below the knee a very serious operation. I became acquainted with hospital gangrene, sloughing of the flaps, and traumatic delirium. It is with great pleasure, then, that I look back on so many successful cases, in later years, of this operation, the mortality of which Mr. Erichsen, in his third edition, states as 40 per cent., from three years' statistics at the principal metropolitan and provincial hospitals.

I have been accustomed to follow the example of a very successful operator, Mr. Hussey of Oxford, in tying all large veins, as well as the arteries. In primary amputation, I have always seen more or less sharp febrile reaction, and I generally meet it with calomel and jalap, plenty of water and tea, and a diet restricted for two or three days to a little beef-tea and milk. As to the dressing of the stump, I usually touch its fresh surfaces with carbolic acid solution, bring them together as accurately as possible with silver sutures; then apply a layer of dry or wet lint covered over with one of lint soaked in carbolic oil; and then, as I was first taught to do by one of Mr. Callender's earlier papers, wrap the limb and stump in plenty of cotton-wool with a bandage loosely applied. I, of course, avoid all unnecessary disturbance of the stump. I do not avoid exposing it to the air during its dressing, and sponge it well with warm water. Sometimes it has not to be dressed from the first for many days. Arms and forearms often unite at once and require no dressing. Where matter forms in the cavity of the stump, and tension appears, I freely remove as many sutures as necessary, and break down all union between the flaps, if necessary, so as to ensure free and rapid exit to all discharges.

In conclusion, I may observe that I think the general results of amputations of late years have been much more favourable, and that the dangers of hospitalism have been much exaggerated. I cannot tell to what the improvement is to be attributed, unless to the superseding of ligatures by the use of catgut-threads cut short and of torsion, and to the greater use of antiseptics.

EPILEPTIFORM CONVULSIONS OF THE RIGHT SIDE, WITH APHASIA.

By J. LOCKHART CLARKE, M.D., F.R.S.,
Physician to the Hospital for Diseases of the Nervous System.

Mr. F., aged 74, a retired officer in the army, had jaundice two years ago, but was not confined to his house. During this period, he had an attack of epileptiform convulsions of the right side, followed by profound sleep for some hours. Six months later, he had a similar attack, the right side of the face being affected first by clonic spasm, and then drawn to the same side for several hours. After an interval of five months, he had another and similar attack; and one more, only a month later. After the last, he was profoundly unconscious for some hours, the arm and leg of the right side being somewhat flexed and stiff. The next day, he could use his right arm and leg, but they were both very weak. He was quite conscious, but had considerable difficulty in expressing his meaning, from inability to recollect the words he wished to use. To whatever question I asked him, he repeatedly answered, "my right arm, my right arm, my right arm is unable." The day after, he was somewhat improved, could walk, use his right arm, and say with difficulty nearly all that he wished, but he was quite unable to write even a short letter; for, whenever he attempted to do so, he substituted wrong words, or words that had no meaning, and, being sensible of his error, he at once gave up the attempt. During the next three days, there was a continuous jerking movement of the right arm, which was at length stopped by morphia.

Four months later, he had a very severe fit of convulsion of the right side. When I saw him, his head was twisted to the right, and both eyes deviated to that side. His lower jaw was in constant motion, and

his right arm was incessantly jerking. After a few minutes, both arms and both legs became convulsed. On no other occasion had the left arm and leg participated in the convulsive movements. The patient was quite unconscious, his bronchial tubes were choked with mucus, and after a few hours he expired.

In the intervals between the paroxysms, the treatment consisted chiefly of bromide of potassium, combined sometimes with digitalis.

A *post mortem* examination was made twenty-one hours and a half after death. The body was extremely emaciated. On opening the head, nothing remarkable was observed in the dura mater. On removing this membrane, a layer of fluid was found beneath the arachnoid, over the convolutions of both hemispheres. The quantity of fluid which escaped on removing the brain amounted to between two and three ounces. Most of the arteries were more or less atheromatous, and the gray substance of the convolutions and of other parts was exceedingly pale. The entire brain was small, and the whole of the left hemisphere was decidedly smaller than the right. The posterior lobe did not reach so far back on the left side as on the right, and was less pointed. The posterior half of the third frontal convolution, and the lower parts of the transverse frontal and transverse parietal convolutions, were very much wasted and depressed, so that the processes which run from them to the insula, and which normally are almost covered by them, were entirely exposed when the temporo-sphenoidal lobe was drawn aside. The heart was of average size. Its muscular tissue was healthy, but the wall of the left ventricle was much thickened. The aortic and pulmonary valves were quite healthy, as were also the tricuspid and mitral, with the exception of being a little atheromatous. The liver was small and firm to the touch, with a tendency to cirrhosis. There was a broad antero-posterior groove on the convex surface of its right lobe. The gall-bladder contained four gall-stones of the size of large marbles. Both kidneys were contracted; their cortical portions were diminished, and they were nodulated on the surface at different parts. On the surface of each, also, there was a cyst; that on the left kidney was about the size of a large marble. The spleen was small; its investing membrane had the appearance of having been inflamed, and its substance was softer than natural.

OVARIOTOMY SUCCESSFUL IN A GIRL EIGHT YEARS OLD.

By T. SPENCER WELLS, F.R.C.S.,
Surgeon to the Queen's Household and to the Samaritan Hospital.

OVARIOTOMY is now so generally and so often practised that a record of any single case is only interesting when there is something unusual in the history of the patient, or some peculiarity in the operation. The facts that an ovarian tumour of sufficient size to render surgical aid necessary has been observed in a girl only eight years old, and that ovariectomy has been successfully performed, appear to be of sufficient importance to call for the publication of a short account of the case.

On January 5th, 1874, a little girl, eight years of age, of German parentage, born in California, was brought to me from San Francisco, having been sent over by the advice of Dr. Levi C. Lane and Dr. Regensberger of that city. She was rather small for her age, and the central part of the abdomen was occupied by a tense movable cyst. I arranged a consultation for the 7th of January with Sir Wm. Jenner and Dr. Sutor; and we all agreed that there was a cyst in the abdomen, and that I should tap it with a fine trocar and aspirator to ascertain if it were hydatid or ovarian.

On the 8th of January, Mr. Thornton administered a little chloroform, and, with the kind assistance of Dr. Sutor, I removed twenty-six ounces of opaque slightly viscid fluid, which I had no doubt was from an ovarian cyst. A hard substance like half an orange, either the contracted cyst or a hard portion of the ovarian tumour, was felt to the left side, after the fluid had all escaped.

The child did not suffer at all after the tapping, but the fluid soon began to distend the cyst again.

On the 23rd January, Sir William Jenner saw her again, and wrote: "There is nothing in the chest to contraindicate operation. The result of tapping is very interesting. I fancy now I can feel connection with pelvic contents on moving the mass, as if there were a long pedicle. I have advised very decidedly the operation of removal. Children bear operations well."

On January 27th, assisted by Dr. Tracy of Melbourne, and by Mr. Thornton, chloro-methyl having been administered by Dr. Day, I made an incision, nearly four inches long, through the abdominal wall

in the median line below the umbilicus, and divided the peritoneum to the extent of three inches. A free cyst was tapped, emptied, and drawn out with a solid mass at the base. There was a long pedicle, and I was able to pass a silk ligature and tie the pedicle in two portions without including the Fallopian tube. I cut the ends of the silk close to the knots, leaving very little tissue beyond the ligatures on cutting away the tumour. The tied pedicle and the knots of the ligature were allowed to fall back into the pelvis. On examining the uterus and other ovary with one finger, I was doubtful which ovary I had removed, though I believed it was the left. The uterus did not feel as large as a walnut, and I could not feel an ovary, nor the ligature I had just applied. The wound was closed by silk sutures passed in the mode I usually practise in ovariectomy. During the passage of the sutures, there was more difficulty than usual in preventing escape of intestines and omentum, but there was no other peculiarity in the operation. A little ascitic fluid came away after the cyst.

The solid portion of the tumour weighed three ounces, and the cyst contained twenty ounces of fluid. In the solid portion, there was a mass of bone covered with true skin, from which grew a quantity of long light hair. The hair was rolled into balls and matted together by sebaceous matter. The skin covering the bone was perfect, and lay on a bed of adipose and areolar tissue. The bone was proved on section to be true bone, not a mere calcareous degeneration. A full description of this cyst was given by Mr. Thornton when it was shown at the Pathological Society; and the specimen will be preserved in the museum of the Royal College of Surgeons.

During the first and second days after operation, the little patient had some pain, and was rather feverish. After the third day, recovery was uninterrupted, and she sailed from Liverpool for New York on the 21st of February, twenty-five days after ovariectomy.

After the operation, I received a letter from San Francisco from Dr. Lane, in which he said—"In October, 1873, I was called in by Dr. Regensberger. There was a large abdominal tumour lying behind and beneath the umbilicus, and of such dimensions as to cause considerable anterior protrusion of the abdomen. Our diagnosis was an intra-abdominal tumour of the cysto-sarcomatous type, in which the cystic element greatly predominated. The solid portion, susceptible to palpation, lay to the left of the median line near the umbilicus. By relaxing the abdominal wall, the growth could be moved in all directions. One month later, I again saw the child, and was convinced that the tumour was rapidly enlarging, whereupon both Dr. Regensberger and I strongly advised the parents to consult you."

I was unable to ascertain with anything like accuracy when the tumour was first observed.

I shall be obliged to any member of the Association who can furnish me with references to other cases of ovariectomy in young children.

ICHTHYOSIS LINGUÆ FOLLOWED BY EPITHELIOMA LINGUÆ.

By HENRY MORRIS, M.A.Lond., F.R.C.S.,

Lecturer on Anatomy at and Senior Assistant Surgeon to the Middlesex Hospital.

SINCE the publication of my paper on this subject in the BRITISH MEDICAL JOURNAL of February 21st, 1874, I have had the good fortune to listen to Mr. Fairlie Clarke's communication to the Royal Medical and Chirurgical Society, of "Cases of (so-called) Ichthyosis Linguae".

The briskness of the discussion which followed amongst the Fellows of the Society left no time for visitors to take part in it; Mr. Clarke and I differ, however, upon a few points, as to which I should have liked to say a few words.

He considers the essential nature of the disease to be a chronic inflammation accompanied by an overgrowth of the papillæ. But when the disease reaches the stage of epithelial cancer (which, sooner or later, he tells us it always does), the rete mucosum "increases enormously at the expense of the papillæ, reducing them in many places to mere threads, and dipping down between them in the form of large club-shaped processes." It would thus seem that, as the ichthyosis advances, the hypertrophied papillæ, which are its leading feature according to Mr. Clarke, must necessarily pass back to their normal size as they gradually dwindle down into a state of atrophy. The inference then is, that there is a stage in the progress of the disease when part of its essential nature—viz., an overgrowth of the papillæ—no longer exists; or, in other words, that as the disease is growing worse and worse, it gradually recovers.

The importance attached by Mr. Clarke to the hypertrophy of the papillæ, leads him to suggest the name "papilloma" as more appropriate than "ichthyosis"; and to regard this affection in its earlier stages as allied to warts, corns, and the "papillary tumour of the gums" described by Mr. Salter. He says, however, that it is distinguished from these affections in two ways; 1, so-called ichthyosis linguæ attacks only the tongue and the inside of the mouth, but no other mucous membrane; 2, it slowly spreads, but gives only slight inconvenience, and no pain. But neither of these are real distinctions between ichthyosis linguæ and the "papillary tumour of the gums", for surely this latter is a disease of the mucous membrane of the inside of the mouth, and no other mucous membrane is, I imagine, subject to it; while, as regards the second so-called distinction, Mr. Salter tells us that his case of "papillary tumour of the gum" was painless and continued to spread, and in Sir William Fergusson's case there is no mention of pain, and the growth increased and recurred frequently. In spite of some similarity in the microscopical characters of the growths in these two cases on the one hand, and of ichthyosis linguæ on the other, there is this great difference; the growths were actual tumours, with shaggy villous surfaces, and they occurred in a situation where, normally, there are numbers of papillæ: whereas ichthyosis of the tongue and oral mucous membrane has not the appearance of a tumour, but is a mere thickening of normal tissues, chiefly of the epithelium, extending over a large superficial area; and it may appear on a cicatricial surface where no papillæ exist, as, in Case I, I reported. For these reasons, the term papilloma does not seem to me a suitable one. The papillæ, in many cases of ichthyosis linguæ, do certainly become hypertrophied, owing to the immense increase in their epithelial sheaths; and there is, too, sometimes a great hypertrophy of the subepithelial fibrous layer of the mucous membrane, as Dr. Goodhart's admirable drawing shows. In both these particulars, we have a resemblance to what is often found in ichthyosis of the skin.

I cannot agree with Mr. Clarke in regarding this change in the mucous membrane of the mouth as one due to chronic inflammation excited by irritation. For reasons I have elsewhere stated, the source of irritation ought to be very well defined before a change in the tongue is attributed to it. The irritation arising from inveterate smoking counts for little, when we find that ichthyosis linguæ occurs in those who have never been great smokers, and when we remember that hundreds of smokers of short pipes, and short cigars, too, take in "very hot smoke", but do not suffer from this disease. It unquestionably occurs in persons whose tongues have never been exposed to any excessive or unusual irritation, whether from smoking, tongue-scraping, glass-blowing, or otherwise; while the case quoted by Mr. Clarke, in which disease of the ear preceded ichthyosis linguæ, affords no more support to the theory of inflammation from irritation than it does to that of altered nutrition simply. I do not know if Mr. Clarke has been able to prove that persons with ichthyosis linguæ have a strong inborn tendency to the development of warty growths; nor do I see how treatment directed to the digestive organs can benefit (as it seems to do ichthyosis linguæ) a condition due solely to irritation in a person with or without such a tendency. It is admitted that ichthyosis linguæ never gets well under treatment; but, being of the character and kind it is, ought it not, if produced by irritation, to disappear soon after the removal of the irritation? Should we not expect the dogma of the schoolmen—"Sublatâ causâ, tollitur effectus"—often enough erroneous, to be, at least in this case, verified?

As regards operative treatment, the wisdom of excising the affected tissues depends upon the degree and extent to which they are involved. When the disease is localised, and of a severe form, excision seems advisable, whether the patient is seen in the early or middle stage. If it be widely diffused over the surface of the tongue or buccal mucous membrane, would it be well, at any stage, to attempt to cut away the whole? I think not. When epithelioma has supervened, the surgeon must be guided in his treatment of the twofold affection, as he is in the treatment of epithelioma alone.

My own cases support Mr. Clarke's conclusions; (1) That ichthyosis linguæ is more common in males, (2) is a disease of manhood, (3) is not necessarily or constantly connected with syphilis, (4) runs on in time to epithelioma.

Some of the cases mentioned by those who took part in the discussion prove an association in the same person, and also in persons of the same family, of ichthyosis linguæ and ichthyosis of the skin; so that, clinically as well as anatomically, the name given by Mr. Hulke ten years ago is shown to be well chosen. The objection that ichthyosis of the skin is a congenital malformation is not a strong one. Though often congenital, it often does not attain its greatest development till towards puberty, and it is stated on authority to appear occasionally late in life.