swelling beyond a little puffiness of the tissues of the scalp over and around the seat of fracture. In the course of a few days the child became bright and lively, the deviation of the eyeballs and the ptosis disappeared, and on January 8th he was discharged from the hospital apparently quite well, no swelling being perceptible in the region of the fracture, the depression of which was still evident.

Four days later, on January 12th, the child was brought to my out-patient room, when I saw him for the first time, and on examining the head a distinct swelling was apparent immediately over the seat of fracture. The swelling was oval in shape, about two inches in length, one inch and a quarter in breadth, and slightly constricted at its middle, its long axis running parallel with the direction of the fracture; it was raised about three-quarters of an inch above the level of the surrounding surface, and was soft and fluctuating; it exhibited distinct pulsation synchronous with that felt at the anterior fontanelle, was partially reducible on pressure, and became fuller and more tense when the child cried; the skin covering it presented a normal appearance. The fracture could be felt beyond the anterior and posterior margins of the tumour, and, after partially emptying the latter by external pressure, the depression of the bone beneath could also be distinguished. The child, though somewhat dull and drowsy, presented no other symptoms. The only treatment adopted consisted in applying moderate pressure over the tumour by means of a pad of lint and bandage.

January 19th. The swelling was somewhat diminished in size, and the pulsation less distinct.

January 24th. The pulsation had quite ceased; the tumour was much smaller and softer; it still became more tense when the child cried, and was only reducible after prolonged pressure.

February 15th. The swelling had entirely disappeared and the child appeared to be enjoying perfect health; there was still a marked depression in the bone along the line of fracture.

The condition, of which the foregoing case is a good illustration, was first fully described by Mr. Clement Lucas, in the *Guy's Hospital Reports* for 1876; since that date other instances have been recorded both by himself and other surgeons. Lucas believes that the cerebro-spinal fluid escaping through the fracture in the vault of the skull comes, not as one would suppose, from the subarachnoid space, but from the lateral ventricle, owing to the laceration of brain substance which accompanies the injury to the head involving the ventricular cavity. In two instances he has been able to verify this opinion by *post-mortem* examination, and in two other recorded cases a similar communication has been found to exist.

The present case, to some extent, supports this view, for the deep in-driving of the bone at the seat of fracture would almost necessarily be accompanied by a wound of the dura mater, while from the nature of the injury and the symptoms which the child afterwards presented, it is probable that some laceration of brain substance was also produced. The fact that the swelling did not appear until after an interval of thirteen days also agrees with the period at which the tumour has first shown itself in other cases, and Lucas suggests that the inflammation which follows the injury to the brain is accompanied by softening of the cerebral substance and increased secretion of cerebro-spinal fluid, "so that pressure from within and yielding of the brain-wall together contribute to the escape of fluid from the ventricle;" it accordingly accumulates beneath the scalp in the form of a distinct tumour, which, owing to its communication with the interior of the cranium, presents the characteristic symptoms already described. The absence of any cerebral symptoms at the time the tumour appeared is accounted for by the very young age of the child, for it is a recognised fact that in infants extensive mischief may be going on in the brain, without producing the same marked symptoms which would usually be present in an adult.

The cessation of the pulsation, and the difficulty in reducing the tumour after the twenty-eighth day, were probably owing to the gradual closure of the fissure in the bone cutting off the communication with the interior of the cranium, and the gradual disappearance of the swelling after that date was the result of absorption of the fluid by natural means, assisted by the application of external pressure.

According to Conner (*American Journal of the Medical Sciences*, July, 1884), the prognosis in traumatic cephalo-hydrocele is very unfavourable, half the recorded cases (which up to 1884 were seventeen in number) having terminated fatally from the super-vention of meningitis. The accompanying sketch illustrates the

shape and situation of the tumour, and its relation to the subjacent fracture, the outline of which is indicated by the dark lines.

A CONTRIBUTION TO THE STATISTICS OF STONE OPERATIONS.

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Nor long ago the excellent work of Sir Henry Thompson, *On the Surgery of the Urinary Organs*, translated into German by Dr. E. Dupuis (Wiesbaden, 1885), came into my hands, and in the last lecture (p. 149) I read the following lines: "It is the sum total of result obtained by employing the two procedures which is to be regarded as the measure of the surgeon's success. And I think I may say that a list of 782 cases in male adults, the mean of whose united ages exceeds 60 years, with 82 deaths, or 1 in 9½ cases, is a result which will be held to justify the selection and adaptation of the method to the case, which has been adopted throughout this series. I venture to say that it is a result which has not, certainly to my knowledge, hitherto been realised."

Professor Kovács, at Buda-Pesth, has recently published his stone operations. It is true that Sir H. Thompson is able to show larger numbers, but the statistical data of Professor Kovács give a result which is a little better than Sir H. Thompson's.

Sir H. Thompson, on 716 patients, performed altogether 812 operations, with 84 deaths (10.3 per cent.). His cases are divided in the following manner:

13 female patients:

10 lithotomies, with 1 death.

3 lithotrities — — —

15 children:

12 lithotomies, with 1 death.

3 lithotrities — — —

2 extractions.

If these 30 cases are deducted, there remain 782 cases of male adults.

110 lithotomies, with 39 deaths, 35 per cent.

672 lithotrities " 43 " 6.5 "

Total 82 10.5

At the First Surgical Clinic Professor Kovács, on 233 patients, performed 248 operations, with 21 and 18 deaths respectively (8.5 per cent. and 7.25 per cent.). There were:

77 sectio perinealis lateralis, with 4 deaths.

2 sectio alta " 1

168 lithotrities " 16

1 extractio calculorum —

But it must be remarked that among the cases treated by lithotripsy there were 3 who died of intercurrent diseases—namely, one patient of 14 years died of apoplexia cerebelli, one patient of 67 years of cholera Asiatica, and one patient of 48 years of pneumonia. If these cases are deducted, as seems to be reasonable, the mortality becomes less.

The cases of Professor Kovács, classified in the same way as Sir H. Thompson's, give the following result:

13 female patients:

all 13 lithotrities — —

115 children (namely patients under 20 years)

70 lithotomies, with 2 deaths.

75 lithotrities " (4) 3 "

1 extractio calculorum — "

and 2 sectio alta " 1

(The two cases of sectio alta are cited separately, because Sir H. Thompson did not mention any cases of sectio alta amongst the lithotomies of male adult patients.)

These 131 cases deducted, there remain 117 male adults treated by lithotomy and lithotripsy—namely:

7 lithotomies, with 2 deaths, 28.5 per cent.

110 lithotrities " (12) 10 " (10.9 per cent.) 9 per cent.

Total 117 (14) 12 (11.9 per cent.) 10.2 per cent.

Consequently, from this combination, it is clear:

1. In the female patients lithotripsy was performed without a death.

2. In children—namely, patients under 20 years—lithotomy (sectio perinealis) was performed 70 times, with only 2 deaths;

consequently, 1 death to 35, namely, 2.8 per cent. Lithotripsy was performed 45 times, with 3 deaths, because, if the one that died of apoplexia cerebelli be omitted, the mortality is 6.6 per cent.

3. In the list of male adults—namely, patients over 20 years—there were 7 lithotomies, with 2 deaths, a result which, in spite of the small number of cases, is better than Sir H. Thompson's, the mortality being only 28.5 per cent. Of the 110 lithotripsy cases, 10 died, omitting the two patients who died of intercurrent diseases, giving a mortality of 9 per cent.

Thus lithotomy and lithotripsy were performed on 117 male adults, with 12 deaths—a mortality of 10.2 per cent.; consequently the result is about 0.3 per cent. better than Sir H. Thompson's result, which is 10.5 per cent.

CLINICAL MEMORANDA.

FUGITIVE OEDEMA OF EYELIDS.

A SISTER OF MERCY consulted me on March 1st of this year. Her history was that she had not menstruated for four months. (She was 46 years old.) She had been subject all her life to stomach and head troubles, and she had had many attacks of erysipelas of the face and head; the last attack of erysipelas was six years ago. She had always had a puffiness of the face, often the headache. Her friends often used to say, "Hav'n't you a touch of erysipelas? Your face is so swollen." Her present condition began in December, 1887. The swelling of the eyelids was much worse in the morning, and was sometimes so marked that she could not see out of them until she had bathed them and been about for a time. There was a discharge from the eyes at times, which glued the lids together. The swelling kept coming and going; it generally lasted two or three days, and returned when she got another headache.

She was a big-faced woman, with a large, loose frame. Her face and brow were covered by drops of sweat. There was quite a cushion of oedematous tissue overhanging each upper eyelid. There was nothing which would indicate eczema. She was free from any organic disease of the heart or kidneys. The legs were not swollen.

REMARKS.—Such cases as the one given above are not uncommon. We often find those who are the victims of periodical headaches present a condition of fugitive oedema of the eyelids. In one instance the swelling was limited to one orbit, and looked as if the man had been stung by a wasp. We also find many women during the menopause who have localised swellings of the hands and arms—swellings which are tender, pit on pressure, are preceded by pain, but pass away after a few hours of exercise.

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A CASE OF HIP-JOINT DISEASE WITH PERIPHERAL NEURITIS AND EPILEPSY.

T. C., aged 15, was seen by me on December 20th, 1887. For the last three years he had suffered from disease of right hip-joint. The lower limbs were stretched out at full length in the bed. On the right thigh there were six openings which occasionally discharged pus, three on the outer and three on the inner side. Both feet were "dropped," so that the upper part of each foot was nearly on a straight line with the front of the leg. A rule placed along the left leg and foot lay only half an inch above the surface of the leg. On the sole of the right foot the arch was deep, and on the upper part of this foot there was a slight rounded prominence. He could dorsiflex the toes and feet to a small extent. The skin from the knee down was dry, scaly, and cracked; its condition somewhat resembled ichthyosis. The nails of the feet were kept closely cut to prevent them growing into the flesh, otherwise they presented no trophic changes. The knee-joints were ankylosed. The legs were very hyperæsthetic, so that the boy would not allow them to be washed, and complained of the weight of the bedclothes. His feet could not be bent into their normal position. There was no anesthesia. Two months before I saw him he had had severe cramps in his legs. The knee-jerks were well marked. The plantar reflex was present on both sides. The peroneal nerves were not tender. There was no difficulty in passing urine or feces; no bedsores. Three months before I saw him he commenced to have "fits." He "screamed," lost consciousness, and was convulsed in them. He never bit his tongue or passed his urine in those fits. There was no aura. He died on February 17th, 1888, from exhaustion. There was no necropsy.

REMARKS.—The dropped feet, the trophic changes in the skin and joints, and the hyperæsthesia were due to peripheral neuritis. Dr. Gowers says that nerves near suppurating joints may become inflamed. The nerves on the left side were involved, and this was an instance of "sympathetic neuritis." The nutritive changes in the skin are interesting. Irritative lesions of nerves are specially liable to be followed by trophic changes. It is well known that peripheral irritation sometimes produces epilepsy.

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THE SIGNIFICANCE OF BLOOD-PRESSURE IN RENAL DISEASE.

WHILE I thoroughly appreciate and agree with the whole tone of Dr. Broadbent's remarks on the significance of the blood-pressure in acute renal disease, I feel that on one point I must differ from him. After well describing the course of the variations of tension usual in that disease, he points out, what is certainly true, that failure to develop increased tension generally means inability or defect of the heart, and is, therefore, of unfavourable prognostic import. But he goes on further to remark that "the low tension is not always so caused; there is sometimes diminished resistance at the periphery; the capillaries and arterioles are relaxed, and allow the blood to slip through them as in pyrexia, and the pulse is not only weak but short. It is not easy to understand why this should be of bad augury, and it is only by observation that this conclusion has been reached."

The correctness of the observation I can confirm, but the explanation seems both unnecessary and deficient in probability. Putting nerve influence on one side, the three principal factors in the production of arterial tension are heart power, peripheral resistance, and mass of blood to be propelled. With peripheral resistance increased, heart muscle developed, and tissue waste going on at nearly normal rate, we have the most typical examples of high tension, as seen in men who, although suffering from chronic granular kidneys, are struggling to do the work of health. If, however, as is apt to occur in more acute conditions, the heart does not develop power in proportion to resistance, we find the pulse still persistent but not so hard. Persistency of the pulse, as shown by the sphygmogram, commonly spoken of as the trace of high tension, does not necessarily indicate raised tension, nor even absolutely increased peripheral resistance; it only shows that the resistance is increased relatively to the propelling force, and is found not uncommonly to co-exist with great softness or compressibility.

Shortness of pulse is, however, a different affair, and is only seldom found in conjunction with the increased peripheral resistance common to all forms of Bright's disease. Any interference, however, with the mass of blood to be propelled may, at any rate for a time, take away both the tension and the persistence, leaving the pulse both weak and short. We see this after bleeding, sometimes after purging, and I think it possible that in Dr. Broadbent's case the course of the disease had so interfered with the mass of the blood as to produce shortness, as well as compressibility, of the pulse, and that the condition may, therefore, be explained without calling on the hypothesis that the capillaries and arterioles were "relaxed." The heart was very weak, and there was no increased tissue change to produce excess of excrementory matter, and, therefore, of resistance, so that there was no likelihood of any increase of tension, and I suppose that the disturbance of both mass and quality of blood, produced by the large dropsical effusion, and the extreme albuminuria would, like either bleeding or purging, be sufficient to produce the shortness of the pulse. I make this suggestion merely for the sake of putting this case on all fours with others which on any different hypothesis are very difficult to explain.

While compressibility of pulse is not uncommon in the later stages of chronic renal disease, such shortness as to be suggestive of diminished peripheral resistance is chiefly met with in cases in which some intercurrent malady, such as paralysis, has so altered the patient's general condition as to food and waste and blood production, that the mass of blood to be moved is lessened. As a fact, we do see men whose pulses have formerly been so tight as to burst their arteries, leading an invalid semi-vegetable existence, with pulses beating shortly in slack arteries, the peripheral resistance no doubt still being sufficient to oppose the passage of quantity, but, the quantity being no longer there, the amount to be propelled is well within that which can be resisted.

This is, I think, the true explanation of these somewhat rare