or adjacent softening. In its centre were two calcareous masses, irregular in shape, each about the size of a bean. The microscopic characters were most nearly those of a glioma. No structural lesion could be found elsewhere in the brain.

REMARKS.—That the tumour was the cause, direct or indirect, of the convulsive attacks must be regarded as highly probable. It was the only cause discoverable. Its duration was evidently considerable, and may well have corresponded with the duration of the symptoms. Calcareous nodules of such a size rarely form in a tumour of that character, except after a long period of time. The points of chief interest about the case are:

1. The aura existed, and probably, therefore, the convulsion commenced in the arm of the same side as that on which the tumour was situated.

2. The aura was arrested by a blister above its position and then transferred to the opposite side. The arrest by local treatment of the local commencement of a convulsion due to organic brain-disease is, of course, common enough; but migration of the aura to the opposite side in such a case is certainly a rare event.

A fit commencing by motor or sensory alterations in one side of the body must be due to changes taking place in the opposite hemisphere of the brain. Hence the commencing convulsion in this case cannot have been due to the immediate local effect of the tumour, but must have been produced by its influence on the distant grey matter of the opposite hemisphere by means of the commissural fibres, in the midst of which, it should be noted, it was placed. When, by a peripheral impression on the left wrist, such an influence was exerted on the right cerebral hemisphere as to restrain the development in it of the convulsive tendency, the influence of the tumour on the hemisphere in which it was situated was such, that that hemisphere then led the way in developing the convulsion in a similar manner by producing the same symptoms on the opposite side of the body.

The length of time which the tumour had existed without causing other symptoms is worthy of remark. It is no doubt to be accounted for by its distance from the motor tract and by its tendency to degeneration rather than to growth.

A MODE OF EMPLOYING PRESSURE IN CASES OF INFLAMMATORY ENLARGEMENT.*

By S. M. BRADLEY, F.R.C.S.,
Assistant Surgeon to the Royal Infirmary, Manchester.

MY object in this brief communication is to introduce to the profession a mode of employing pressure in certain cases of inflammatory enlargement, which, I think, will prove more efficient and convenient than the methods at present in vogue.

Whether the *modus operandi* of pressure in removing such enlargements be simply due to the support afforded to the weakened vessels, and the too abundant blood, etc., being squeezed from the part, or whether it be due partly to this cause and partly to a stimulation of the lymphatics, forms no part of my theme. I go on the idea that the advantage of pressure in certain cases of inflammatory enlargement and thickening, both acute and chronic, is well established and generally admitted, and, for the sake of brevity, shall confine my remarks to explaining the mode of compressing, 1, the testis; 2, the breast; and 3, various parts of the trunk and extremities, presuming that a little ingenuity will enable the surgeon to adapt the treatment to any other part of the body not specially named.

1. *Mode of Compressing the Testis.*—The admirable results obtained by strapping the testis in cases of orchitis are known to all; but, in spite of this, it is not as frequently practised as it should be, partly owing to the time it takes, and partly to the fact that if improperly applied, as it is apt to be, it does more harm than good, and, according to Van Buren, has even been known to cause gangrene. Further, there is the trouble of reapplying it every forty-eight hours; for in a short time the dwindling testicle hangs loose in its sticky case, and ceases to derive any good from the strapping.

The little appliance which I use obviates these disadvantages, and, while it is more efficient than the plaister, it is perfectly easy to apply. It consists of a piece of stout elastic webbing two and a half inches long by half an inch broad; five ends, each half an inch broad, are appended to each side, each of them measuring about one and three quarter inches; the upper and lower being a little shorter than the central pieces. The belt is applied to the back of the unshaven testicle, and laced up in front from top to bottom. The last end, being placed at right angles to the rest, comes up the front of the testis, and is fastened to the first end of the tape, left long for the purpose, and by this means all is made snug and comfortable.* The apparatus is exhibited applied to an egg-pessary, and I can assure the members of the Association that it is perfectly easy to adapt it as neatly and completely to the swollen testicle. By this appliance, pressure can be applied with the greatest nicety, and, of course, as the testis shrinks, the elastic webbing follows it, so as to keep up an equal and a constant pressure; while, again, if it require tightening, this can be done in a moment without the inconvenience of depilating the scrotum as we are apt to do in dragging off adhesive plaister. I do not wish to encumber this communication with cases; suffice it to say, that I have obtained the most satisfactory results from this mode of compressing the testicle, not only in cases of orchitis, but also in hæmatocele, and in hydrocele, after preliminary tapping.

2. *Mode of Compressing the Breast.*—The breast, no less than the testis, is difficult to compress by strapping, and hence often left unstrapped when great good would accrue from its proper application. To overcome this difficulty, I have had constructed a modification of Salmon and Ody's well-known truss, and find that by this means we can in a minute apply a perfectly uniform and sufficient pressure to the entire gland, or to any part of it which requires compressing. The principal modifications consist in the hoop being larger and less stiff, in the spinal pad being very much larger than in the truss, and in the breast-pad being concave, with a diameter of five or six inches. A ball-and-socket joint, with studs inserted at different points of the outside of this pad, enables us to apply pressure to any part of the gland by means of the strap, which encircles the opposite half of the body to that embraced by the steel hoop, being affixed to any of these studs as circumstances may require. The instrument is prevented from working down by a second strap, or broad piece of tape, passing over the shoulder, connected to the hoop back and front. I cannot but hope that the advantages of this plan are sufficiently obvious to render further argument unnecessary.

3. *Mode of applying Pressure to various parts of the Trunk and Extremities.*—We not unfrequently meet with cases of inflammatory enlargement about the trunk and limbs which require pressure; *e.g.*, the cure of boils and carbuncles is expedited, and the pain is lessened, by such treatment. The simplest, and at the same time the most effectual, method of accomplishing this, is by placing a piece of sheet lead, such as the one here shown, with a hole cut out of the centre large enough to encompass the base of the carbuncle, and then, by means of elastic straps and a lace, affixing it firmly to the part required. Anyone can manufacture such an appliance in a few minutes; the size of the lead sheeting and the length of the straps, of course, being proportioned to the size of the tumour and the part of the body to which it is applied. In the treatment of indolent bubo, with high, hard, and irregular edges, I have obtained most gratifying results from the employment of pressure by means of a piece of sheet lead placed over the bubo, without, of course, any aperture being made in the pad. The three instruments exhibited are manufactured by Messrs. J. and W. Wood of Manchester.

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Norwich, August 1874.

* Sometimes I have two pieces placed at right angles to the lower margin. I should add that the belt is curved a little forward at the lower part so as to form a partial bag.

ACUTE INTERSTITIAL INFLAMMATION OF THE KIDNEYS IN SCARLET FEVER, FATAL ON THE TENTH DAY.

BY JOSEPH COATS, M.D., Pathologist to the Royal Infirmary, Glasgow.

THE following case seems to me to be of considerable importance, and that on several grounds. In the first place, we have here an acute renal complication occurring in scarlet fever, not, however, at the usual date of the nephritis of scarlet fever, but in the course of the fever itself. Secondly, the kind of inflammation is not that usually met with in connection with scarlet fever; we have here a case of interstitial inflammation, whereas it is well known that the parenchymatous or tubal form is that commonly met with. It may be also worthy of remark, in the third place, that this is a case of acute interstitial nephritis, a form of disease whose existence has been doubted by some. In connection with the first of these points, I subjoin a brief history of the case, and an abstract of the *post mortem* appearances.

Y. R., aged 20, was admitted into the fever wards of Glasgow Royal Infirmary, under Dr. McLaren, on September 30th, 1871. The patient stated that his illness began five days before admission,

with loss of appetite, aching pains all over the body, headache, sore throat, difficulty of swallowing, and sickness without vomiting. A scarlet rash was observed by the patient on the second day of his illness; and, on admission, an abundant eruption was present on the trunk and limbs. The throat was slightly affected, but there was difficulty of swallowing. On the day of admission, the temperature was 101.8 deg. in the axilla. After admission, the patient was exceedingly restless, delirious at night, and only half conscious. The eruption is noted as still present on the abdomen on October 4th, and on that day the temperature was 103.4. He died on October 5th, or five days after admission, being the tenth day of the disease.

A *post mortem* examination was made about twenty-seven hours after death. Both liver and spleen were considerably enlarged, the liver weighing close on five pounds, and the spleen twenty-one ounces. The mesenteric glands were also enlarged, and red on section, and there was redness of Peyer's patches and enlargement of the solitary follicles in the large intestine. Both kidneys were much enlarged, weighing together twenty-two ounces. They presented to the naked eye very much the appearances of the large white kidney, the cortical substance being very pale and much increased in thickness.

The microscopic characters in this case were quite unequivocal. The enlargement and paleness of the kidney were due to an infiltration of the cortical substance in almost every part by multitudinous round cells. These were packed in between the tubules, separating them, but not to any great extent destroying their epithelium. The cells were about the size of white blood-corpuscles, and had a plump full appearance. A thin transverse section shows the appearance described exceedingly well, especially where the epithelium has dropped out; and such is the number of the round cells, that the section has a very close resemblance to one in my possession, taken from a leuchæmic nodule in the kidney, there being a similar close infiltration of the interstices between the tubules. Of course there is the essential difference, that, in the present case, the condition is generally diffused throughout the cortex. The epithelium of the renal tubules was very little changed, perhaps slightly enlarged and granular. The section, it may be remarked, very closely resembles a wood-cut in Rindfleisch's *Pathological Histology* (New Sydenham Society translation, fig. 159, vol. ii, p. 162).

We have here, therefore, an acute interstitial nephritis, generally diffused through both kidneys, occurring in a case of scarlet fever, which proved fatal on the tenth day. I am not aware that any similar case has hitherto been recorded, but, of itself, it certainly demonstrates the existence of an acute interstitial inflammation of the kidneys.

ON THE DIAGNOSTIC VALUE OF VOMITING AND PAIN IN HEPATIC SUPPURATION.

By J. FAYRER, C.S.I., M.D., F.R.C.P.

DR. MACLEAN, in an interesting communication to the BRITISH MEDICAL JOURNAL of August 1st, 1874, on the subject of the Diagnostic Value of Uncontrollable Vomiting in certain Forms of Hepatic Abscess, alludes to the untrustworthiness of "the absence of pain as a sign of hepatic abscess", and illustrates this by the case of an officer who had served in the recent expedition to the Gold Coast.

The insidious mode in which the liver will pass into a state of suppuration is so frequently observed, not only in India, but after leaving the country, that the justice of Dr. Maclean's remarks would be confirmed by most medical officers of even a few years' experience in the East. But I would add that, in certain cases of liver-abscess, there is not only absence of pain, but sometimes also of vomiting, and of other symptoms, such as cough and pain in the shoulder, that are so frequently present in this disease. For, as pain, when it does occur, is chiefly due to implication of the capsule of the liver in the inflammatory action, and nausea or vomiting either to direct pressure by the swollen liver or to irritation of the vagus, so, when the peritoneal covering is not involved, and the pressure, owing to the small size of the abscess, is not great, these symptoms may be wanting. Nay, more: the liver may suppurate without any more marked symptom than such as may be seen in ordinary malarious poisoning, in which the general deterioration of health is expressed by feverish attacks attended by some hepatic congestion; and the first evidence of the formation of matter may be the sudden and unexpected evacuation, through the stomach, bowels, or lung, of the contents of the abscess; or perhaps sudden collapse and speedy death from rupture into the peritoneal cavity. In such cases, before the above catastrophe happens, diagnosis is most uncertain, and often attended with great difficulty, from the absence of well marked diagnostic symptoms. In others, again, where all the most characteristic indications have been present, including rigors or chills, fevers, sweats, high temperature, pain, and vomiting, they occasionally pass away, and health is restored, without any proof that pus has really formed. It is to be borne in mind that an abscess may have undergone absorption, or that it may have opened into the intestine, and the contents have drained away so gradually, in combination with the fluid excretions of diarrhœa, as to have escaped notice. Therefore, although the diagnosis of hepatic abscess in many cases is easy enough, it is certain that in some it is very difficult, and may escape detection even by the most careful observer. Probably in no case does the knowledge that results from long experience prove of more service than in this.

The following case illustrates the value of Dr. Maclean's remarks on the absence of pain. It also shows that even vomiting and other symptoms, generally regarded as significant of its presence, may also be absent when liver-abscess has occurred.

A young Englishman, aged about 21, of fair complexion, healthy constitution, and of active and vigorous frame, who had been two or three years in India, and occupied in a merchant's office, complained of failing health, loss of appetite, feverish attacks, tenderness and fulness in the hepatic region, inability to rest at night, a general sense of *malaise*, and disordered bowels. He looked anæmic, and the conjunctivæ were tinged with bile. His tongue was coated, and his pulse quicker than natural. The temperature was not taken. There had been no rigors, though probably he may have had chills. Neither vomiting, severe pain, nor cough, had occurred. He was continuing to attend office, and up to that time, I believe, had not been absent from his work. On examining the hepatic region, I found that there was considerable enlargement of the liver, but it was unaccompanied by any marked tenderness. I prescribed such remedies as appeared necessary, and recommended change to sea or to the Sand-heads.

I did not see him again for some time; he had gone to reside in the vicinity, out of Calcutta. When I saw him, some weeks later, he was looking thin and pale, but in good spirits. He was at his work as usual, and, I believe, had not been absent more than a day or two. He said he felt weak, but was rapidly regaining strength. He informed me that one day, after dinner with some friends, one of them, in play, accidentally gave him a blow in the region of the liver. This produced immediate symptoms of collapse, attended by coughing and vomiting of a large quantity of purulent matter. The blow had evidently ruptured a liver-abscess which opened into the stomach, and was thus evacuated. On recovery from the shock and depression caused by this accident, he soon began to regain strength and to improve in health. He returned within two or three days to his duty, and ultimately regained his former health, and is, I believe, still alive and well. The absence of any pulmonary symptom shows that the abscess did not open into the lung.

The freedom from any marked symptom in this case illustrates the insidious mode in which liver-abscess will sometimes form, how difficult the diagnosis may be, and how cautious one should be in framing it.

A CASE OF INTERMITTING HYDRONEPHROSIS.*

By THOMAS COLE, M.D., M.R.C.P., Physician to the Royal United Hospital, Bath.

ALTHOUGH the subject of my paper has not yet succumbed to his disease—and I hope the day is far distant when he will render his case pathologically complete—yet I trust that the meeting will not be uninterested in the notes I have ventured to bring under consideration to-night.

Mr. S., aged 23, of medium height, well-made but spare, living in a healthy village about twelve miles from Bath, consulted me in March, 1873. He had enjoyed fair health up to 1870, when, one day, a pain seized him in the left lumbar region, accompanied by sickness. It lasted a few hours, and then left him. After a month's interval it came again, and molested him, after the second attack, at intervals of one or two months. Latterly the intervals had been much shortened, being about a fortnight. The attacks lasted from a few hours to several days. The pain never affected the back, nor did it extend down the legs, testicle, or penis. He expectorated a large quantity of slimy matter during the paroxysms, but none during the intervals. The appetite, always good when he was free, became very bad. He was never jaundiced. The bowels were generally confined. He never noticed anything wrong with the urine. The tongue was red, with raised papillæ, and slightly furred. On physical examination not the slightest trace of disease could be discovered. Urine passed at the time of his visit was found free from any abnormality, except a super-

* Read before the Bath and Bristol Branch.