that can be made for the removal of the disease; yet they are sufficient for the restoration of the lip. The natural margin of the lip is retained. The only cicatrix left is the single one in the middle line. The resulting mouth shortly becomes an excellent one, perfectly useful, and not inartistic.

A CASE OF VAGINAL ATRESIA AND ABSENCE OF MENSTRUATION CURED BY THE USE OF TANGLE-TENTS.

By W. MURRAY, M.D., M.R.C.P. Lond.,
Physician to the Newcastle-upon-Tyne Dispensary, etc.,

MISS A. B. C., a young lady, aged 27, slightly marked with the pits of small-pox, consulted me fifteen months ago. She complained of a severe pain in the hypogastric region, and radiating pains in the back, loins, and lower extremities. She had suffered in this way for some years, and she said her pains were periodically increased at intervals of five or six weeks. On further investigation, it appeared she had menstruated only once or twice in her life, and that the show scarcely amounted to a teaspoonful on each occasion. On proceeding to examine the uterine organs, I was surprised to discover that the vagina was a mere *cul-de-sac*, an inch deep, terminating in a conical depression. The walls of the *cul-de-sac* were made up of cicatricial tissue; and at the fundus of the depression in which the *cul-de-sac* terminated, I detected a minute opening* through which a No. 1 elastic bougie would scarcely pass. In order to make a further diagnosis of the case, I determined to introduce a tangle-tent into the minute orifice I had discovered, and then to pass the uterine sound through it. This was done; and on passing the sound, I introduced my finger into the rectum and felt the point of the instrument projecting through the solid barrier in the vagina into a cavity above. Beyond this upper part of the vagina I could feel a round body very like the uterus in size and shape. As the dilatation had caused some pain, and as no immediate result followed it, the patient and her friends declined further interference at this time, and I did not see her again until August last. I then found her suffering as before, and very much altered in appearance; her countenance was haggard, her manner hysterical, and her nutrition impaired by constant vomiting. She was now prepared to go through any kind of treatment to obtain relief.

Having obtained the assistance of Mr. J. B. Fife, whose advice and surgical skill proved invaluable throughout the whole procedure, I dilated the small opening running through the closed portion of the vagina, until it admitted the tip of the little finger. At this point an accident occurred, from the string attached to the tent having given way, leaving the tent firmly impacted in the newly formed canal, where it remained for about thirty hours, when Mr. Fife removed it by making a slight notch in the canal on each side of it. When the tent was removed, the finger could be freely passed through the opening it had formed into the upper part of the vagina, and there we found a somewhat contracted but perfectly formed cervix uteri. The dilatation was now continued freely by sponge-tents until a large speculum could be passed into the vagina. The uterine sound was then passed, and a very minute os uteri was discovered by it. The sound, when twisted a little to the right, could be introduced an inch deep into the cervix uteri. This enabled us to secure the introduction of a small softened tangle-tent in the direction indicated by the sound, and by a little careful manipulation, the tent slipped almost overhead into the uterus. When this tent was withdrawn the next day, a very free passage into the uterus remained. Both the vagina and the uterus now showed an obstinate disposition to contract and assume their former condition, so that we were compelled to incise the cervix uteri freely with Greenhalgh's hysterotomy, and to keep both the canal of the cervix and the vagina constantly dilated for some days.

Exactly one month from the time the hysterotomy was used, the menstrual flow appeared and continued for three days. In every respect the period and the flow were normal. From this time the patient improved rapidly in general health. At the end of another month, finding the os uteri slightly contracted, I introduced a tent for a few hours, and gave the patient two doses of aloes. After this, the menstruation again took place, but it was unfortunately stopped by a severe fright received by the young lady during the following night. From this time all went on well till another month elapsed; then she began to suffer pain, to vomit, and to assume a hysterical manner, but after waiting patiently for a few days, relief of all these symptoms was obtained by the reappearance of menstruation for the third time. On this occasion, it was full,

* I must mention the existence of several large pits near the vulva. These, the patient's mother remembers, were the result of small-pox, from which her daughter suffered when she was two years old.

free, painless, lasted five days, and left the patient quite well, without ache or pain. Six or eight menstrual periods have now occurred; for the most part they have been very satisfactory, and on each occasion they have been followed by great improvement of the patient's health.

The chief point of interest in this case is the entire abeyance of the menstrual functions of the uterus during a period of at least fourteen years from the age of puberty. The entire want of action previous to the dilatation of the parts was proved by the total absence of retained menstrual fluid. I might add, that it is quite clear the closure of the vagina was produced by the extension of small-pox into the vulva, and subsequent ulceration of the walls of the vagina. The case strongly commends the use of dilatation instead of cutting in cases of closure of mucous canals of all kinds; and where no opening exists to permit of this, I should introduce a fine trocar, and then leave a tangle-tent in its place as a commencement of the dilating process.

In a subsequent communication, I hope to draw attention to the cure of false anus by the use of tents, and to show that by stretching such fistulous openings, we can rely upon such an amount of contractile inflammatory action being set up as to close them.

THE PATHOLOGY OF RIGORS:

ILLUSTRATED BY A CASE OF HEMIPLEGIA, FROM DISLOCATION OF THE ATLAS, PRECEDED AND ACCOMPANIED BY CONSTANT SHIVERING AND SENSE OF COLDNESS.

By J. BURNEY YEO,

Resident Medical Tutor in King's College.

THE following case, extracted from the second volume of Cruveilhier's *Pathological Anatomy*, fell under my observation after reading Dr. G. Johnson's lecture in the BRITISH MEDICAL JOURNAL on the Pathology of Rigors. As it appeared to me to afford very remarkable, and, of course, entirely undesigned, support to the explanations therein given of their phenomena, I called Dr. Johnson's attention to the case; and he agreed with me that it was of so singular a nature as to deserve translation.

Femme La Croix, aged 68, came under notice on October 13th, 1832, with hemiplegia of the right side; paralysis both of sensation and motion. The hemiplegia came on suddenly, while she was in the hospital of La Charité, into which she had been admitted six months before for *severe shivering, which never left her* (un grand frisson qui ne la quittait jamais). Warm baths were prescribed for her; and it was after one of these baths that she became paralysed. One curious point is, that at first she was uniformly paralysed, or rather enfeebled, on both sides (*affaiblie des deux côtés*), and it was only later that the hemiplegia came on. She stated that ever since the commencement of her illness she had *felt frozen* (*glacée*). The hottest applications could not make her warm. The cold "penetrated even to the marrow of her bones". The surface of the body was cold to the touch, like "touching a cold-blooded animal." She complained of severe pain behind the right ear, and suffered much from painful cramps of the lower limbs. She remained in this condition till Jan. 30th, 1833, when she died.

During all this time, the coldness was constant. Cruveilhier observes, "La constance de l'algidité était toujours pour moi un nouveau sujet d'admiration."

The *post mortem* examination shewed that the *raison anatomique* of the hemiplegia and other symptoms was a displacement of the atlas, producing compression of the cord immediately below the medulla oblongata. This compression had borne more on the right than the left half of the cord, and had led ultimately to its disorganisation. In the right half, the *débris* of the cord was grey, without a vestige of white substance. In the left, the *débris* contained still a little white substance. The annular ligament of the odontoid process was large and yellowish, with little chalky plates in its substance, much like the alterations undergone by the coats of arteries. The odontoid, or check ligaments, were much weakened, and their fibrous bundles separated by a reddish substance. They permitted the odontoid process to play backwards and forwards so as to produce an incomplete luxation.

Cruveilhier observes that the displacement was due to disease of the ligaments uniting the odontoid process to the occipital bone and the atlas, probably of rheumatic origin.

There is no evidence whether in this case, at the onset of the shiverings, the sense of cold was simply subjective, as we know it to be in ague and in many other cases. It may have been so; although at the time when this patient came under Cruveilhier's observations, six months after the first appearance of these symptoms, and when she had become hemiplegic, the surface was unusually cold.

There can be little doubt, when one takes into consideration the cause of the displacement in this case, that it must have been gradual; and the primary effect of such gradual displacement would be an interference with the vascular supply of the cord, either by direct pressure on the spinal arteries, or by pressure and stretching of the vertebral arteries, which this partial dislocation of the atlas must of necessity produce. In either case, there would be a corresponding anæmia of the cord.

This case, then, appears to offer something like a demonstrative proof that there exists a very close connection between the phenomena of rigors and an anæmic condition of the spinal cord. The singular character of the phenomena presented by this case did not escape Cruveilhier's observation; but the only kind of explanation he attempts is vague and unsatisfactory in the extreme. He says, "The coldness, so manifest and so considerable during the course of the illness, lends support to the opinion of those physiologists who consider the spinal cord as the principal centre of animal heat."

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ST. THOMAS'S HOSPITAL.

CASE OF ADDISON'S DISEASE.

(Under the care of Dr. BRISTOWE.)

THE following case of Addison's disease was referred to in an early number in January this year, when detailing the notes of a case which died under the care of Dr. Greenhow in the Middlesex Hospital. The boy at that time was daily expected to die; but, as occurs in so many cases of the kind, and indeed is a striking symptom of the disease, he recovered so much, that he enjoyed a fair condition of health, and was sent to Walton Convalescent Hospital. The fatigue, however, was too much for him; and, as usually happens, he was suddenly prostrated; and, although he improved again slightly, he speedily died. The case presented most of the typical symptoms of the disease; but the scars remaining of a pale colour, while the surrounding skin was deeply impigmented, is certainly unusual. Another interesting feature observed was the depth of discolouration of the skin decreasing when the patient was improved in health.

W. A., aged 16, employed at a wholesale druggist's, was admitted into the hospital on September 30th. He had been in excellent health until about Christmas of 1866. At that time he fell through a trap-door, and bruised the sacral region; he injured himself, however, so slightly that he continued at his work as usual. To this accident he attributed his present illness. It would seem that pain in the sacral region came on about three weeks after the accident, and continued, off and on, though never very severely, ever since; but somewhere about the same time a change of colour was first detected in his skin. His mother observed that he got "yellow-like all over," but that it could not be "the yellow jaundice," because his "eyes were not yellow." The change of colour was recognised by himself, and by all who knew him. He had been becoming darker and darker throughout his illness. He had been very weak from the commencement, and his weakness had increased upon him; he had been quite unable to work, and had been confined to his bed, more or less; now and then being up for a day, generally for a few hours only, and not unfrequently in bed all day long. He had complained also of frequent headaches, and of frequent nausea and sickness; yet his appetite had generally been good. He had lost flesh somewhat. He had had weakness in the legs, but probably only proportionate to weakness of other parts. There did not appear to have been any actual paralysis. It should be added that his original complexion was said to have been tolerably fair, and like that of other members of his family.

When admitted, he had an universal deep bronze hue, darker in some parts than others, and especially dark in the lumbar and dorsal regions. A few slight scars, and old (?) marks (especially the latter) were deeply discoloured round the edges, their centres affording a marked relief against the surrounding discoloration. He complained of slight tenderness about the sacrum; but there was no other evidence of any disease there. He was extremely weak, but in no degree paralysed. He had a very fair appetite, but was occasionally sick. The tongue was clean; the bowels regular. There was no evidence whatever of heart-disease, lung-disease, of hepatic, or of renal affection. He was thin, but far from being emaciated.

On the evening of admission, he caught cold, which was followed

by some sore throat, and slight bronchitis. These symptoms, however, left him after a few days, and he returned to the state in which he was on admission.

Since then his symptoms continued very much as they were stated to have been before admission. He was extremely weak, rarely able to remain up for more than a few hours a day, sometimes, however, seeming to regain a certain amount of strength for several days together, and every now and then keeping his bed entirely for a week or more. His sickness continued, but varied very greatly. Sometimes he was for days, and even for a week or two, without any feeling of nausea; at other times he suffered from attacks of sickness every day, or every day or two, and occasionally he had severe attacks of sickness, lasting for several days together. The severe attacks of sickness were always associated with severe occipital headache, and, indeed, the headache, in a less severe degree, generally attended his attacks of nausea or vomiting. His tongue was always clean; his appetite generally good (even at the time when he was suffering from sickness); his bowels for the most part regular, and his urine normal in quantity and quality; his pulse was always very small and weak, and somewhat quick. Since the slight attack of bronchitis on admission, he at no time had cough, or other indications of pulmonary disease, and the heart's sounds were quite normal. There never was the slightest symptom of paraplegia; nor indeed any good reason to believe that his sacral tenderness was due to any positive disease in that part, or even to the effects of his fall. Shortly after his admission, his weight was found to be seven stone ten pounds. It diminished a little since then; but not more than two or three pounds. He grew, however, a good deal in height. His temperature (under the tongue) was ascertained shortly after admission to be 98°2.

During his stay in the hospital he had two or three attacks, in which his life was despaired of. The worst of these occurred about the beginning of November, and lasted several days. He then complained of severe occipital headache, great nausea and depression, with coldness of surface (especially in the hands and feet), and blueness of nose. His pulse at the same time was scarcely perceptible. His temperature under the tongue was 98°4. He was treated during this attack with brandy and other stimulants.

It may be added to this, that later in October he suffered for several days from severe pain in micturition; there was, however, no crystalline matter in the urine. Again, early in December, he had an attack of diarrhoea.

December 20th. Although there was no marked increase in the severity of his more urgent symptoms, he had for the last few days been becoming weaker. Able from the first to get up and walk about a little, he could now scarcely be said to do so; for when attempting to walk, he staggered a little, seemed to have difficulty in lifting his legs, especially the left, and took advantage of every help in crossing the ward, and was thoroughly exhausted and forced to get into bed again. He still moved freely in bed. He became very depressed when anything unusual occurred around him. He had grown in height considerably since admission, and apparently lost flesh, although the emaciation was by no means marked. The bronzing appeared to vary with his symptoms, the sister and nurses having remarked that the colour was deeper when he felt better. The pain in the head was still present. There were small patches of a brownish colour on the buccal mucous membrane, and a blue mark on the gum, over the last molar on the right side, on the edge of the tongue on the same side, and a faint line of the same character, at least, on the upper lip. Pulse 84, small and weak. Appetite bad, thirst urgent. Percussion over both apices was moderately fair, and also the breathing. At no time had the temperature been above normal. He was unable to pass urine in the recumbent position. His urine was acid, copious, and very pale, specific gravity just over 1000; it contained no albumen, and gave considerable effervescence on the addition of nitric acid.

At this time it seemed as though death were at hand. He rallied, however; and, with the exception that on two or three occasions during the next month or two he had a comparatively slight attack of headache, sickness, and depression—slight, either from lasting a short time only, or from not being very intense—he enjoyed what was for him a fair average condition of health. Indeed, on March 19th, he seemed as well as he was at the time of admission. His tongue was clean, his appetite good, his weight a few pounds heavier than it was at first. He was, of course, exceedingly weak, could bear no fatigue, and the dark brown colour of skin remained. He was then sent to Walton Convalescent Hospital. But the fatigue of the journey brought on a severe attack of sickness, headache, and dyspnoea, from which he did not recover. At the end of five days, he was brought back to St. Thomas's. He was in the last stage of debility; his extremities were cold; his nose was red; his pulse was scarcely perceptible; he had severe pain in the