

that at last there was a fair prospect of something being done, and the favourable moment ought to be seized at once.

The motion was put and carried unanimously.

A Case of Duchenne's Paralysis.

Dr. ALLEN then exhibited, for Dr. Snowball, a boy aged 13, with the characteristic symptoms of pseudo-hypertrophic muscular paralysis. The details of the case were published in the last number of the *Australian Medical Journal*, page 360. The contrast between the huge size of the gastrocnemii muscles and the real weakness of the lower extremities was very marked. As to the pathology of the disease, changes occur in both muscles and nerves, but those in the former are much more definite and better known than the nervous lesions. In the hypertrophied muscles the first alteration is an overgrowth of the interstitial connective tissue, so that the muscular fibres become separated by more or less broad bands of fibro-nucleated tissue. At a more advanced stage these bands undergo a fatty degeneration, while the muscular fibres themselves atrophy and become granular. Hypertrophy however does not occur in all the muscles of the affected limbs, some being always more or less wasted. The changes in the nervous centres are much more difficult to investigate. In one of Duchenne's fatal cases portions of the spinal cord were sent to Lockhart Clarke, Charcot, and others, who all failed to detect any lesion whatever. In a more recent case, Lockhart Clarke and Gowers discovered wide-spread lesions in the cord, differing in nature at different parts, sclerosis and softening, atrophy, and pigmentation being present in various degrees. Both grey and white matter were affected, and none of the columns of the cord were wholly exempt. It is however as yet undecided whether the disease is primarily nervous or muscular. A series of cases shortly to be published by Dr. Leech of Manchester will doubtless throw new light on the subject. An able *resumé* of present knowledge, with some exhaustive cases, may be found in the recent work by Ross *on the Diseases of the Nervous System*, volume II., page 185 *et seq.*

NOTES ON THE DELIVERY OF AN ACEPHALOUS FŒTUS.

By DAVID JERMYN, L.R.C.S. I., Ballarat.

On the 19th of the present month I was called on about seven o'clock to attend Mrs. E., a thin delicate woman, aged 26,

and then in labour with her second child. The midwife had sent for me on account of ante-partum hæmorrhage.

I found the head presenting in the occipito-posterior position, the membranes ruptured, and a certain but not alarming amount of hæmorrhage had already taken place, with very slight labour-pains. On making an examination of the abdomen, I stated my opinion that it was a case of twins.

A couple of hours later the patient was much in the same state, the pains had increased somewhat, but the labour had not progressed; the hæmorrhage still continued and the patient seemed weaker. I administered ergot with tincture of opium and ammonia, and a couple of ounces of spirits; the ergot was repeated every hour, but without any result, so about midnight I delivered her with the forceps of a small but healthy male infant. Being now quite certain that the uterus contained another fœtus, I secured the cord and gave repeated doses of ergot, but after waiting in vain for a couple of hours I determined to complete delivery.

The patient was at this time without pain, but the bleeding continued. On passing my hand into the cavity of the uterus I found the placenta low down and to the front, but could detect no other fœtus till I had placed my left hand on the upper part of the abdomen and made pressure downwards; then, quite above the attachment of the placenta, I found a remarkable contraction of the uterus, at first barely allowing my finger to enter. Passing through this opening up from the placenta I found a thin umbilical cord, and felt what I took to be the breech of the second fœtus. I now brought down into the vagina one of the lower extremities, having made traction upon which for a short time, strong labour-pains set in, and she was delivered of the singular and unsightly mass which I have forwarded.

On last New Year's Day, while carrying her infant in her arms, she tripped as she was going out of the front door, and fell to the ground from a height of about a foot, thereby sustaining a severe shock, mentally as well as bodily. A week subsequently the veins in her lower extremities began to swell very much. She had several fainting fits about this time, and a large number of dark-coloured pimples broke out over her trunk and extremities, attended with intolerable itching, the last of which are only healing at the present time, and I have

been informed that ever since the accident above referred to she has never been well.

About twenty years since a woman whom I attended in the bush had given birth before my arrival to a very similar foetus, which, having opened on the spot, I found to contain a liver, a gall-bladder, intestines, and a very small or rudimentary stomach, but I was not allowed to take it away.

Dr. ALLEN then submitted the following report of the dissection of the foetus: It is a typical *acephale*, consisting of a short trunk five inches long from the top of the spine to the tip of the coccyx, surmounted by a thick mass of succulent connective tissue, and terminating below in two very large lower extremities. The total length of the creature was fourteen inches. No trace could be found of any head or neck; the shoulder girdle and the arms were represented merely by some small indistinct cartilaginous bodies on the left side. The chest was fairly formed, the sternum being however very short. The diaphragm was represented by a thin transparent membrane; the heart, lungs, and pleuræ were absent, the thorax containing nothing else than delicate bands of connective tissue interlacing together. In the abdomen the liver, spleen, and suprarenal capsules were wanting, and the peritoneum was by no means perfect. Immediately below the diaphragm a large lobulated solitary kidney lay transversely across the spine, giving off from its lower edge two distinct ureters, which passed downwards to a well-formed bladder. The urachus was patent for some distance upwards, but not as far as the umbilicus. A loop of intestine, fourteen inches long, commenced at the umbilicus and passed down to end in a large anus; the first inch and a half of the bowel was slightly wider than the rest, and was marked on the surface by a single narrow raised longitudinal band; it joined the remaining portion of the intestine at an obtuse angle, the opening being protected by a single semi-circular valve; from the point of junction arose a short caecal appendage; the lower and larger part of the bowel was perfectly smooth, and was connected with the posterior wall of the abdomen by a short mesentery; the meconium in the upper part was darker and more solid than that in the lower. The penis was long, constricted at its base, with a slight degree of hypospadias. The testes lay in the iliac fossæ, and possessed well developed vasa deferentia. The aorta commenced above by the union of a

number of intercostal vessels, and extended along the front of the spine under the rudimentary diaphragm, giving large branches to the kidney, intestine, &c.; it then divided normally into large iliac arteries, and the internal iliacs gave off the hypogastric vessels which ran to the umbilicus. The vena cava inferior lay to the right of the aorta, being formed by the large veins of the lower limbs; piercing the diaphragm it divided at once and passed off into the lower intercostal spaces, where it doubtless communicated freely with the branches of the aortic intercostal arteries, thus completing the circuit above. The stump of the navel-cord contained a large umbilical vein plugged with firm clot; the vein did not pass upwards, but rather downwards, opening at last into the right iliac vein close to the vena cava. The course of the blood would therefore be from the placenta through the umbilical and right iliac veins upwards into the vena cava, and by inosculation with the intercostal arteries into the aorta, then downwards to the bifurcation of that vessel, supplying the kidney and intestine; then partly to the placenta again by the hypogastric arteries, and partly onwards to supply the lower extremities, returning thence to the vena cava.

The spinal canal was well developed below, the sacral, lumbar and dorsal vertebræ being distinct; above, it ceased rather abruptly, and was closed in by firm fibrous tissue; the dorsal laminae were everywhere complete; the spinal cord was normal in appearance below, the nerves of the lumbar plexus being very large; higher up it gradually tapered away, the intercostal nerves becoming smaller and smaller at the same time; there was not a trace of enlargement at the upper end, quite the reverse condition holding good.

This foetus, therefore, corresponds perfectly with the terse description given by Rokitansky of these monsters:—"Acephalus, or deficiency of the head, affords an instance in which the brain is entirely wanting. In such a case, more or less of the spinal marrow and vertebral column, especially of the upper part, is generally wanting too. And with this deficiency is combined absence of the heart, of great part of the vascular system, of the lungs, and of the principal abdominal organs, so that, while the urinary and genital organs exist, nothing else can be found within the peritoneal sac, except a rudimentary intestinal canal."

An animated conversational discussion ensued.
