being caused on raising the head, or on attempting to straighten the legs."

On admission (October 15th), the reaction and the pains had subsided, but on attempting any passive flexion of the legs the boy at once twisted over to the opposite side, sharply arching his back, and could bear them fully extended if lying on his back. Any attempt to obtain Kernig's sign produced this curious contraction of the spinal muscles, and was evidently very painful.

The state of the reflexes was as Dr. Hodgson had already noticed, but ankle clonus was present, in addition, on the right side.

There was much loss of power in the extensor muscles of the thigh, and on the right side, and in all cases in which the patellar reflexes were lost there was an extraordinary laxity of the patella tension, so that the fingers could be inserted between them and the head of the tibia.

I have not noticed this phenomenon in so marked a degree in ordinary cases of loss of knee-jerk, and I take it that it may be looked upon as an index of the degree to which the extensor muscles have suffered.

**REMARKS.**

Here, then, we have what may be considered as a fairly widespread epidemic of acute disorder affecting the spinal cord and meninges, and although we have heard a good deal of late of epidemic acute anterior poliomyelitis, I think that these cases do not all conform to the type which we have been accustomed to meet with during the last twenty years, inasmuch as the intense pain in the back of the head and neck, the twichings of the face, the retraction of the head, amounting in some cases to opisthotonos, the marked rigidity, and continued pains in the limbs, the interference with the control over the bladder and rectum, and, in several instances, the more or less rapid and complete recovery, are quite contrary to the usual experience in that disease.

I had the advantage of meeting Sir James Goodhart in consultation over A.O., my fifth case, and he was decidedly of the opinion that we had to deal with cerebro-spinal meningitis, which was the conclusion I had previously come to with regard to the other cases I had then seen.

Sir William Osler makes the statement that those instances of simple meningitis which from time to time we have met in such a severe and fulminating form, are nothing more or less than sporadic cases of cerebro-spinal meningitis.

There are dozens of instances which have been looked upon as more or less classical of this disease which were absent in our cases, notably the rash from which the old name of "spotted fever" was derived, and even in the severe type of which I have seen a few instances, I cannot call to mind any rash. Where this occurs it indicates a malignant form of the disease, and a very severe toxæmia in addition to the local signs. Vomiting also in my cases was unusual, although it did occur in Case v.

It may be that when, as in the epidemic form, the disease becomes generalized, it at the same time loses some of its virulence, and abortive cases do occur; but it is interesting to note that the older the victims the more severe and lasting has been the mischief—one of my cases (Case i, seen with Mr. Way) having died on about the fourth day, while the two youngest (Cases iii and v) have apparently recovered without any trace of the paralyzing occurring after acute anterior poliomyelitis.

So far I have not come across any cases in adult females, nor have I observed any connection between the epidemic and the incidence of herpes zoster referred to by Dr. Garrow of Maryport in Cumberland, in an epidemic of poliomyelitis which occurred there in August and September, 1910. This was also noticed in the Cornwell epidemic this year.

I do not wish to give the impression that every case in the present epidemic is cerebro-spinal fever, but at least I would submit that anterior poliomyelitis is a misnomer, since the meningeal symptoms, either cerebral or spinal, have been most marked.

Cases i, iv, and v in the private series, together with Nos. i and ii of the hospital cases, present clinically the picture of cerebrospinal fever.

With regard to the pathalogy of cerebro-spinal fever there are three cocci which have been claimed by their discoverers to give the specific disease, (1) Diplococcus intracellularis; (2) Still's meningococcus (this in sporadic cases); (3) a micro-organism resembling the pneumococcus of croupous pneumonia; and I am fully aware of the absence of any pathological evidence in my cases as to the presence or otherwise of any of these organisms. Houston and Rankin's recent researches go to prove that the two former are quite distinct.

In Dr. Tullis's cases the specific organisms were not found, though albumen was present in the spinal fluid, which probably indicated inflammation of the meninges, notwithstanding that the normal reducing action of the fluid on cupric oxide was present, which reaction in cases of meningal inflammation is generally absent. Had the cases come under observation during the very early stage, something more might have been learned.

It would be interesting to know in what percentage of cases during the various epidemics reported it has been possible to examine the spinal fluid in the acute and early stage, since bacteriologist I presume would not admit the existence of cerebro-spinal meningitis without the presence of one of the above-mentioned organisms; but of this I am convinced, that, notwithstanding Dr. Allen Starr's classical description in Allbutt's System of acute anterior poliomyelitis, which I must admit describes very nearly some of the milder cases I have seen, we have here at any rate in some of the cases a distinct clinical entity, which is much more serious.

Pain! pain! has been the persistent outcry in all the cases, sometimes persisting for weeks, and as that acute observer, the late Dr. Bristowe, remarks of anterior poliomyelitis that "pain is no essential feature of its clinical history," and that "an almost total absence of pain may be regarded as characteristic of this disease," it is, I think, fairly evident that we have in this present epidemic a condition of things which, to quote from Dr. Ornered, we may at least say, "We have had (until now) very scanty experience."

Now, while I freely concede that bacteriology and modern laboratory research bear a very great and increasing value in determining the hitherto obscure origin of many diseases, as an old practitioner I very much depurate the fact that clinical observation is made to take a back seat to newer methods of diagnosis, and although, as I said before, several of my cases approximate more nearly the type of acute anterior poliomyelitis, there are in some (notably i, iv, and v) symptoms which correspond almost exactly to the "simple type" of cerebro-spinal fever which is described in Allbutt's System of Medicine.

**EPIDEMIC ANTERIOR POLIOMYELOTIS IN SOUTH DERBYSHIRE.**

By JOHN HAY MOIR, M.D., D.P.H.,
NEWHALL, BURTON-ON-TRENT.

In the general interest evoked by the recent epidemic of anterior poliomyelitis during the past summer, a short synopsis of 25 cases which occurred in this district in South Derbyshire may be of some value.

All the cases occurred within the Urban District of Swadlincote, which comprises a population of 22,000, scattered over an area of about three square miles. The principal industries are coal mining and earthware manufacture. During the summer very bad, and many families are in a state bordering on destitution. Dr. R. A. Parkhill has kindly supplied me with the records of 14 cases which came under his care, the remainder being under my own observation.

There were two periods of greatest incidence, the first early in June amongst Dr. Parkhill's patients in the south-west of the district, the second early in August in the north-west. The epidemic apparently spread in this direction through the district, but there is no evidence to show the mode of progress. The distribution of cases was very scattered, with some exceptions, namely, 3 cases occurred in one street, and 2 each in two houses. There was practically no communication between the houses affected, except possibly where the three cases occurred in one street. Twelve cases occurred in very near and dirty houses; 7 (1 Wechsel's, 2 Deichmann's) to be of any etiological moment. Many of the patients were strong and well nourished. The occurrence in both sexes was of
equal frequency. The ages of those attacked ranged from ten months to eight years, three and four years being by far the commonest age.

The mode of onset was mostly with fever, malaise, and symptoms of pulmonary consumption. Some cases began very suddenly and went on with remarkable rapidity to a fatal issue. Constipation was a marked feature; prominent among the symptoms were great tenderness and pain over the spine and the back of the legs, and the presence of Kernig’s sign. Deep reflexes were lost early, but in 2 cases of the encephaloid type the knee-jerks were at first exaggerated. In 1 case a papular rash was present over the face, neck and shoulders; the papules were isolated, superficial and shot-like, and had a small inflammatory base. They were not painful to touch.

Of the 25 cases 5 were of the encephaloid type, and proved fatal, death being due to respiratory paralysis early in the disease—in 1 case six hours after the onset. In the remaining 20 cases—the spinal type—death occurred in 3, and was due to respiratory paralysis in 2. The remaining death occurred a month after onset from acute bronchopneumonia. This gives a total mortality of 8, or 32 per cent. Several cases, which were open to doubt, have been omitted from this analysis.

The paralysis affected one leg in 11 cases, both legs in 4 cases, one arm in 2 cases, one arm and one leg in 1, and all four legs in 2 cases.

Some of the cases bore a great resemblance to sunstroke, and I am convinced that exposure to the sun or unaccustomed excessive heat is an important etiological factor. In 6 of the cases under my observation, there was no proper means of isolation. In many years there were large families of young children who escaped, though they came into more or less intimate contact with the victims.

There was no evidence to show in what way the virus was transmitted in any case.

RETENTION OF A FETUS IN THE ABDOMINAL CAVITY FOR FORTY YEARS.

by E. WEATHERHEAD, M.B.,C. M.R.C.S., L.R.C.P.,
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Cases of extraterine gestation in which the fetus survives the rupture of the membranes is very rarely encountered. The continuance of the development of the fetus without serious accident to the mother until its death at the onset of the so-called “false labour,” and its subsequent retention in the abdominal cavity for a long period, is of historical interest.

At the October meeting of the Sussex Medico-Chirurgical Society I was able to show a specimen of such a fetus which had been retained in the abdominal cavity for forty years. An additional interest was given to the case by the fact that it was possible to turn for the early history of the case to the proceedings of the society itself.

In the notes of a meeting held in September, 1872—just thirty-nine years ago—the following account is to be found:

Mr. Tuke* brought a patient before the notice of the society with a large abdominal tumour, which was examined by some of the members. The woman was of tolerably healthy aspect. She married at 21; had one child, who died in eighteen months. [This, I may say, is a mistake. The child here alluded to is alive now, and made a home for his mother up to the time of her death.] Her husband died, and she married again at 25 and has had no children since. The catamenia were quite regular up to March, 1871. [She would then be 38 years of age.] At the end of April she had an attack of enteritis, relieved by opium. After this she thought herself pregnant, as she felt larger and had what she deemed as the usual signs of child-birth. The expectant family of six were kept up on milk in the breasts. She thought she felt the movements of the child. At Christmas, which would be the termination of the supposed pregnancy, she had severe pains, none of them bearing down. At the medical man who saw her found a tumour in the hypogastric region. There was a peculiar sound on auscultating all the regions of a fetus lying in the abdomen. He heard the placental murmur, not the fetal heart. He did not examine for ballottement. The catamenia returned on

May 3rd; been quite regular to the present time. There is now a very large tumour lying across the hypogastric region. On the left side this is extremely tender, but softer. There is no fluctuation. There appears to be a kind of sulcus in the middle of it. On examination per vaginam the os is very small. On the 7th of March Mr. Tuke examined the tumour. He was invited to the meeting of the society, and about three months after the termination of his report an examination was made by Mr. Tuke on the left side. The tumour can be distinctly felt through the uterine walls. The sound had not been passed, and no examination made per rectum. Mr. Tuke examined the tumour on April 10th. In May he was again invited to the meeting of the society. On May 16th he was informed that the child was a live boy. On June 5th the examination was repeated. The tumour was found to be attached to the peritoneum of the pelvis. They touched the bowel. On using and m tro movement he felt fluctuation on the left side and the body felt soft.