Pending the result of laboratory investigation, irrigation of the anterior urethra with 1 in 4,000 potassium permanganate solution daily was ordered.

The Wassermann reaction was negative. Smears from the meatal pus (Gram and Fontana-Tribondeau) revealed staphylococcus in pure culture and numerous *T. pallidum*, but no other micro-organisms.

When the patient was seen again, three days later, the only appreciable change in the local condition was easier micturition, the stream, still very thin, being continuous; 0.3 gram of novarsenobenzol was injected intravenously at 4 p.m. The patient returned at 5 p.m. next day; he stated that he had noticed no effects at all from the injection, until on rising that morning he had experienced great difficulty—"just a drop at a time"—in passing water, and the lump on the penis was larger and redder. He had gone to work, but had been unable to micturate all day, and was now in great pain. The temperature was 102.4° and the pulse 96. There was redness and oedema of the prepuce, especially the ventral portion, but no discharge from urethra. The lesion on the under side of the penis had become a hot, deep-red, semi-fluctuating tumour, its apex soft and purple; the whole mass was continuous with the ventral portion of the inflamed prepuce. The dorsum penis was apparently unaffected, except that a hard mass in the mid line, 1 cm. long, could be felt through its thickness at the level of the ventral lesion. Exploration with fine gum-elastic bougies showed an impassable stricture about 4 cm. from the meatus.

At 6.30 p.m. general anaesthesia was induced; the whole apex of the tumour was gangrenous. Circumcision was done and all the sloughing tissue removed. Stinking pus escaped and the gangrene was found to extend to a fistula into the urethra. Distal to this fistula the lumen was completely closed by the hard, inflamed urethral wall, a sort of solid cylinder of hard chancre. In smears from the pus only staphylococcus was found. Twenty-four hours after the operation a No. 6 gum-elastic bougie could be passed easily from the meatus along the urethra and through the fistula. Healing was rapid; the fistula closed in three weeks. Later injections of novarsenobenzol produced no ill effects; five days after operation 0.6 gram was injected intravenously; seven days later the Wassermann reaction was definitely positive.

CASE II.

A seaman, aged 26; fourteen days previously while at sea had sore, first noticed as small painless pimple on the penis; this was about seven weeks after coitus. He denied previous gonorrhoea or chancre.

Examination showed redness and oedema of the prepuce, which, with a little difficulty, was retracted to expose the ulcer (2 by 1 cm.) on the mid dorsum of the glans; the raw surface did not quite reach the corona. The base of the chancre was formed by raised red granulations, spotted with small grey sloughs; the edges were heaped, hard, rounded, sloping into the ulcer and into glans tissue. In front and at the sides induration extended for about ½ cm. into the glans tissue; it continued above over corona into the sulcus and inner surface of the prepuce, in this last situation giving a cartilaginous feel, the plaque flicking over on its edge. No part of the lesion presented any of the characters of a soft chancre, nor were any ulcers detected elsewhere on the glans or inner surface of the prepuce. Urethritis was not present. In both groins were large hard discrete glands. There was no rash.

Circumcision was suggested; more cannot be said, for it was not pressed against the patient's reluctance to submit to operation. Pending the result of laboratory investigation, irrigation of preputial sac daily with 1 in 4,000 potassium permanganate was ordered. Smears from chancre (Fontana-Tribondeau) revealed mixed bacteria and numerous *T. pallidum*. No other micro-organisms were detected. The Wassermann reaction was doubtful.

Three days later 0.3 gram novarsenobenzol was injected intravenously at 4 p.m. The patient was seen again at 11 a.m. next day (nineteen hours after the injection); he had noticed no ill effects. There was great increase of the oedema and redness of the prepuce; with great difficulty, however, retraction was possible sufficiently to expose the chancre and corona glandis. The ulcer itself appeared clean, without sloughs, but much swollen and a darker red. The glans tissue around was swollen, very red, and patched with purple blotches—a bruising effect. The Jarisch-Herxheimer reaction was diagnosed, and in the expectation that the local condition would now rapidly improve, irrigation of the sac was repeated and the patient told to return next morning. Alarmed, however, by the size of the penis and by blood escaping from the preputial opening, he stayed in bed "to rest it." He appeared at the clinic at 3 p.m., scared and in great pain. The temperature was 103° and the pulse 110. The swelling and redness of the prepuce were now extreme, and from the opening dripped blood; retraction was possible only so far as to expose the edge of a loose grey slough overlying the meatus.

Under general anaesthesia circumcision was performed. A grey-black, stinking slough replaced the whole of the glans down to the urethra, all the corpus spongiosum being destroyed except the corona glandis, a buttress on each side of the urethra, and a thin "washer" of tissue, including the meatus. The urethra was intact.

No further destruction occurred; granulation was rapid under eusol baths and wet dressings. The circumcision wound healed quickly, no chancroids appearing on its cut edges. The inner surface of the excised prepuce was carefully examined, but showed no sign of ulceration anywhere.

Seven days after the first injection the Wassermann reaction was found to be definitely positive.

Further treatment by novarsenobenzol caused no ill effect.

It seems reasonable to conclude that the effect of the "reaction" is to damage still further the chancre tissue already damaged by the treponema. Deeper invasion of the tissue may then readily ensue by the bacteria already present in the chancre, and, the whole being shut up together, phagedaena results.

Not to labour the obvious moral of Case II, I confess I should have operated on almost any one of the four days before that on which, in fact, the operation was performed.

A CASE OF CERVICAL CARIES SIMULATING CEREBELLAR TUMOUR.

BY

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In an exhaustive paper published in *Brain*, Part xcvi, 1901, Taylor and Collier drew attention to the occurrence of optic neuritis associated with lesions of the cervical cord, and showed that both headache and vomiting of cerebral type may occur with such lesions. The following case appears to be of interest as an example of this association, and indicates the very great importance of accurate diagnosis, for, whereas the treatment of cervical caries is essentially conservative, if an intracranial tumour be present operative procedures often hold out the only, albeit slender, hope of successful treatment.

History.

A boy, aged 7 years, was admitted to the children's ward of Charing Cross Hospital for stiffness of the neck which had lasted about three months. His mother stated that for two months he had walked as if paralysed, and had frequently fallen. He often complained of headache, particularly in the back of the head, and occasionally vomited, the vomiting being unassociated with the taking of food. A week before admission to hospital he developed a squint in the left eye.

Condition on Admission.

A slight, pale child, preferring to lie quietly in bed, he was usually drowsy, but when roused was conspicuously intelligent and docile. The head was held rigid and erect in the mid-line and definitely increased tonus of both trapezii and both sternomastoids was present, notwithstanding which movements of flexion and extension of the head and lateral movements were free and unaccompanied by pain. The boy's action when stooping to pick up a coin from the floor was stiff and awkward and strongly reminiscent of spinal caries, and when he was first seen in the out-patient department a tentative diagnosis of caries of the cervical spine was made.

Condition under Observation.

On more thorough examination well marked optic neuritis, estimated at over two dioptres of swelling, was found in both eyes; pupillary reactions were normal. All reflexes were present but difficult to obtain; no evidence of altered sensation could be found, but the seven cardinal signs of a cerebellar tumour of the left side were each in turn elicited and became more marked during the fortnight that the case was under observation, namely:

1. Inco-ordination of movements of the left arm and hand as compared with the right, dysdiadochokinesis of the left hand.
2. Bárány's test of deviation to the left on pointing with closed eyes to a stationary object a succession of times was obtained.
3. Tendency in walking to lean and to deviate to the left side—not definitely marked while crawling on all-fours.
4. Left hypotonia affecting both arm and leg.
5. Muscular weakness on the left side, particularly of the left arm.
6. The head was slightly asymmetrical in shape, the left occipital region being fuller than the right.
7. The attitude of the head, though not characteristic, was consistent with the presence of a left cerebellar tumour encroaching on the mid line.

The radiographer's report on a skiagram of the head and neck was to the effect that no evidence of spinal caries was present. No abnormality could be detected in the posterior fossae of the skull. There was no dysphagia, and nothing could be seen in the throat. In the absence of any definite indication a digital examination of the pharynx was not made, nor was a pharyngoscopic examination attempted.

Operation.

Symptoms and physical signs were in favour of cerebellar tumour, and this view was confirmed by others who examined the case. The progress of symptoms and increasing optic

neuritis indicated the need for operative interference, and sub-tentorial decompression by the Cushny method, combined with exploration of both lobes of the cerebellum, was performed by Mr. Norman C. Lake. On incision of the dura there was no gush of cerebro-spinal fluid to indicate increased tension, and both lobes were pulsating normally; the left, although more prominent than the right, was otherwise normal. Regrettably death occurred from respiratory failure just as the operation was successfully completed.

Post-mortem Examination.

Nothing abnormal was found in the brain to account for the optic neuritis, and there was no evidence of increased intracranial pressure. A retro-pharyngeal abscess was found behind the anterior common ligament, embracing the bodies of the third and fourth cervical vertebrae and communicating by a fistula with a cavity in the centre of the fourth cervical, from which the abscess had extended into the spinal canal and had caused pressure on the adjacent spinal cord. There were tuberculous lymphatic glands in the neck.

Despite the unfortunate termination of the case, it is difficult to see what other diagnosis could have been made on the basis of the observations recorded above.

The diagnosis of cervical spinal caries made when the case was first seen was given up with some reluctance, and the suggestion tentatively advanced that two separate lesions were present, respectively intracranial and intrathecal, but this in turn was surrendered in view of the apparently overwhelming evidence in favour of cerebellar tumour.

The case, however, affords an admirable example of how closely lesions of the upper cervical cord, especially at the level of the third cervical segment, may simulate intracranial tumour; it possesses the further interest of occurring in a child aged 7 years, the youngest in Taylor and Collier's series being a girl of 15.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

A CASE OF ENCEPHALITIS LETHARGICA.

R. R., aged 18, who had never had any previous illness, nor any discharge from the ear, nor nasal catarrh, played football on October 25th. That night he had a shivering attack and headache. He stayed in bed next day (Sunday). When I saw him on October 27th he complained of headache, chiefly in the left parieto-temporal region; the temperature was 102° F. As he continued in this state and was slightly lethargic, I sent a specimen of his blood for examination, thinking he might be suffering from typhoid fever, but it was returned "definite negative." He continued in the same condition another week. As he got more heavy and drowsy, and the tongue was thickly coated, the blood was sent again for examination, with the same result. At this time, about fourteen days from the commencement of the illness, a rotheln-like rash appeared on the body and limbs, and lasted several days. There was some bronchial catarrh at both bases; the temperature varied between 101° and 103°. The pulse was 55 to 60. The pain was still very severe, affecting chiefly the left side.

About November 14th he had slight left ptosis, and dilatation of the pupil on the same side. For about a week vomiting was very troublesome. On November 16th lumbar puncture was performed; the fluid was clear and under slight pressure. Dr. Davies, M.O.H. for Bristol, kindly reported that there was no excess of polynuclear cells and no meningococci in the film, and that on cultivation meningococci and other organisms were not grown; reducing substances were present in normal amount, and the globulins were not increased. There was no retraction of the head, and Kernig's sign was not present. The temperature about this time came to normal, and except for two days remained so for the rest of the illness.

About November 20th he had a well marked right-sided convulsion lasting several minutes. He was still distinctly lethargic; he objected very much to the light. I now thought it might be a case of encephalitis lethargica, and I asked Dr. Charles, of Clifton, to see him with me in consultation. The patient was better on this day than he had been for some time. Dr. Charles agreed with the diagnosis; he also noticed slight right facial paralysis. It had not been present on the previous day; on the following

day it was worse. On November 25th there was partial paralysis of the left arm and left leg. The knee-jerks were absent. About this time he became aphasic. Early in December he developed paralysis of the soft palate, and had great difficulty in swallowing; for two days he took nothing, but this gradually passed off. For several days he had repeated attacks of spasmodic contraction of both arms, got very red in the face, and perspired over the forehead. He was now lying in a completely lethargic condition; cerebation was very slow; when asked to put out his tongue, after about four seconds the tongue would slowly come out. Both pupils were very dilated.

On December 23rd he had a general convulsion, and afterwards was completely blind. On January 1st he was very lethargic, control of sphincters was lost, and emaciation was becoming marked. He remained in this condition until January 17th, when he had repeated attacks of spasmodic contractions of both upper extremities, the legs not being affected. He died the same evening after nearly three months' illness. The trained nurse who looked after him aptly described it as a "living death." As far as treatment was concerned I tried hexamine but it seemed to have no effect; so very little seemed possible beyond nursing and feeding. A stained specimen of the blood appeared normal. The discs were a little pale but otherwise normal; the urine was normal. No post-mortem examination was obtained.

Bristol.

MAURICE C. BARBER, M.B., Ch.B.

PNEUMONIC HAEMORRHAGIC EFFUSION INTO PLEURA.

THE case described here is sufficiently rare to make it worth recording.

A single woman, aged 32, had been attended by me early in March, 1919, for a mild attack of influenza followed by slight icterus. From this she recovered completely. On April 26th I was sent for urgently; she had had a rigor, and the temperature was 104°. She was very ill; the pulse was 108. Respirations were normal, and no physical signs could be detected. That night the temperature dropped to 100.6°. For the next three days it was irregular, gradually rising to 103.4° on April 29th. The pulse was never very rapid and did not rise beyond 106. On this day the respirations were 26. During this time marked dullness became manifest over the lower portion of the right lung with general signs of consolidation. On April 30th she appeared so ill that I got Dr. Carey Coombs to see her with me. An exploratory needle was passed into the dull area, but the syringe filled quickly and easily with pure blood. Dr. Scott Williamson, pathologist, who examined this, reported that it was pure blood containing pneumococci, and expressed the opinion that probably the lung was infected with the pneumococcus and had been penetrated by the needle. The temperature now became hectic, never rising above 102.8° in the evening; respiration ranged from 28 to 32 and the pulse from 116 to 136. As there were no signs of the lung clearing up, on April 12th an exploratory needle was again used, and a few drops of blood stained serum drawn off.

Her general condition continued to deteriorate, and on April 17th I drew off 1 drachm of thin pus. On April 18th Dr. Coombs again saw the patient with me, and, tapping more towards the axilla, 15 oz. of serum beginning to get purulent were drawn off. The next day Mr. Lansdown resected a rib, and removed, in addition to a quantity of thin purulent serum, large masses of old blood clot. From this time onwards she made an uninterrupted recovery, and now the right lung expands fairly well.

It is clear that there was pneumococcal infection, and that the lower lobe of the right lung was infected. This infection was apparently so virulent that extensive haemorrhage into the pleura took place, and it must have been some of this blood which was first drawn off. The failure to obtain more than a few drops of fluid on the two next occasions was probably due to the needle pushing the blood clot in front of it, and never entering the main effusion. The theory that the blood originally drawn off was from the pleural cavity and not the lung is strongly supported, though perhaps not absolutely proved, by the large masses of clot removed from the pleural cavity at the operation.

Wrighton.

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