to be diseased. With a sharp chisel I removed the upper wall of the osseous auditory meatus, and then, cutting upwards, I chiselled through the root of the zygoma and opened up the cerebral cavity. The dura mater was incised and a Macewen's pus-searcher passed upwards and inwards for about an inch into the temporo-sphenoidal lobe. Here (the usual place) a large abscess cavity was opened and a quantity of offensive pus escaped. The attic and neighbouring mastoid cells were then opened and scraped. The cutaneous auditory meatus was slit open so as easily to admit a finger, and its upper and posterior parts were excised so that a large drainage tube might at some future time be introduced. An india-rubber tube was then passed through the upper wound above the ear into the abscess cavity and the wound plugged with gauze and iodoform. The three following days a fair quantity of pus escaped. Then for three days there was no discharge of pus, and the cerebral symptoms began to return. The tube was removed, and the pus-searcher re-introduced. A large quantity of pus came away. After this the patient made an uninterrupted recovery. He left the hospital on March 22nd, and has since returned to business, and feels perfectly well. The wound was kept plugged from above, and allowed to heal from below by granulation. At first the drainage tube was introduced through the upper wound, but after ten days the ear was drawn up and the tube was passed through the enlarged cutaneous auditory meatus. The abscess cavity was never syringed, but insufflations of boric acid and iodoform were used daily for two months.

The advantages of this method of operating are obvious. In the first place, we get good and efficient drainage from below. The drainage tube can, if necessary, be kept in position for months without any discomfort. It can easily be removed and replaced, and there is no danger of not again finding the abscess cavity. We can also at the same time efficiently treat and cure the attic and mastoid cells, which in these cases are nearly always affected, and thus prevent any recurrence of the disease. Only one incision and only one operation are necessary. The operation and after-treatment are more difficult and tedious than in the ordinary method of trephining, but the results are certainly more satisfactory.

NOTES OF TWO CASES OF DYSTOCIA ARISING FROM RELATIVE SHORTENING OF THE UMBILICAL CORD.

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DYSTOCIA arising from this cause is not a common occurrence, but probably it exists more frequently than is reported. These few facts noted below may be of interest as bearing on the diagnosis and treatment of this and allied conditions.

CASE I.—Mrs. H., aged 24, 2-para, was admitted to the Glasgow Maternity Hospital in February, 1897, with strong labour pains and with the history of being in labour for the previous two days, and of having had an easy first confinement. Abdominal palpation elicited the following facts: The quantity of liquor amnii was excessive, bordering on the condition of hydramnios. The foetal parts were masked and the position could not have been made out but for the violent action of the limbs, which made the diagnosis easy. The head was situated above the brim and balloted freely from side to side. On auscultation the foetal heart sounds were readily heard, but were irregular in rhythm, and especially in intensity. The sounds of the foetal movements were very distinct.

From these observations the conclusion arrived at was that the delay in the fixation of the head was caused by the degree of hydramnios present. The item in the history regarding the length of labour was discounted. Preparations were made to rupture the membranes, coincident with the vaginal examination, should this be thought desirable. The vagina on examination was found blocked by the protruding membranes, and the os was fully dilated. After rupturing the

membranes and pushing the head into the superior strait, the descent of the head was very rapid. The head was soon born, and the cord was found so tightly grasping the child's neck that it was impossible to slip it over the head. By exerting pressure on the fundus the cord was with difficulty slipped over the shoulders, and labour terminated successfully. The length of the cord was 19½ inches.

CASE II.—In this case—which occurred before No. 1—the relative shortness of the cord was more marked and the hydramnios less so. Mrs. R., aged 36, 10-para, was admitted to the Glasgow Maternity Hospital in January, 1897, with strong and very rapid labour pains and with a history of being in labour for some hours. Her previous confinements had been natural. The position of the child was readily made out abdominally. The head was found freely balloting above the pelvic brim. The foetal heart sounds were distinct during only a period of from ten to twenty seconds, with absolute pauses during intervals corresponding to the duration of the pains. The stoppage of the sounds was very abrupt, and showed the interference with the circulation to be very complete. A diagnosis was made of dystocia due to short cord or of one relatively so from being coiled round the child's neck. Vaginal examination revealed the same state of affairs as existed in the other case. The membranes were ruptured and the case left to Nature. After an interval, notwithstanding powerful contractions, the head still remained above the brim. Suprapubic pressure was applied so as to depress the occiput into the superior strait, after which engagement and descent were very rapid till the head was born. The cord was found very tightly coiled twice round the child's neck, and was pulseless. On applying pressure to the fundus enough of the neck was available to allow of the cord being cut. Just as this was being done, and as the result of an extra strong pain, the shoulders, trunk, and breech were successively swept past the head, which remained anchored at the vulva, thus performing, outside of the pelvis, movements similar to those which go by the name of "spontaneous evolution" when performed in the pelvis. In this case the actual length of the cord was 30 inches, and the available less by two turns round the child's neck.

REMARKS.

The points which occur to me as being worthy of notice are:

1. Neither patient was a primipara.
2. In both the presenting part failed to engage, and in No. 2 the head remained free, even after rupture of the membranes.
3. The condition was in each accentuated by the excess of liquor amnii.
4. The utility of abdominal examination, and especially of auscultation, as illustrating the feasibility of diagnosing interference with the circulation through the cord, be it due to tension or compression.
5. The success of suprapubic pressure in causing or hastening engagement.
6. The indication for treatment being to express the child rather than deliver with forceps, so as to push down the placenta *pari passu* with the child.

HERPES ZOSTER OF THE FACE WITH PARALYSIS.

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EICHHORST has written an article on this subject epitomised in the BRITISH MEDICAL JOURNAL of June 12th, 1897, in which he refers to the recorded cases of those combined affections—only 18 in number. Usually the herpes has appeared before the paralysis, there being only 3 exceptions to this. Herpes occipito-collaris has been most frequently seen, but when the facial paralysis has appeared first the herpes has been in the distribution of a single branch of the fifth nerve. Only 1 case is recorded in which the herpes was present on a mucous surface; taste may be affected.

On looking up the literature of the subject I find no reference to it in the early edition of the *Medical Digest*. Hebra

and most other authors do not mention the paralysis. Hyde, of Chicago, would seem to have seen many cases, and gives an account of the severe symptoms often present—agonising neuralgia, formidable inflammation of all parts of the eye, and falling out of teeth and hair, scars from suppurating of the vesicles, paresis and paralysis with resulting muscular atrophy, years of intense suffering, leaving the patient a physical wreck; and, finally, a rare termination in meningitis and pyæmia. That herpes of the face may thus result in most serious illness and permanent deformity is most important for practitioners to know. These cases are probably much more frequent than the 18 Eichhorst refers to. Two were reported in the *Lancet*, 1894, and I think I have seen others in the medical papers. The two following cases occurred in my practice recently, and may be of interest.

CASE I.—Mrs. R., aged 68, complained of severe neuralgic pain on the right side of head, face, and neck, on September 26th, 1896. There was no cause for it that she could assign. A red patch, the size of a half-crown, was visible near the centre of right sterno-mastoid, and another further back about third cervical spine; a smaller spot over right lower jaw below angle of mouth. There were troublesome spasmodic movements of the left eyelids, and the face was a little drawn to the left. The next day the right face was quite flaccid and paralysed, and face was drawn to the left. She could not close her right eye, nor that side of the mouth, and liquids escaped freely when she tried to feed. There were vesicles on the red patches, much pain, mostly below the right ear, and radiating in all directions. On September 29th the conjunctiva and mucous membrane of mouth were red and sore, and on the latter herpetic spots were visible. She complained of a very disagreeable taste from this time. On October 3rd the skin rash was drying and redness fading. The eye and mouth were rather more comfortable. There was severe neuralgia in right lower jaw. After this the case slowly improved. The neuralgia left her in two weeks. The nasals, supraorbital, infraorbital, and especially the mental exits of the fifth nerve on the right side of face remained very tender and are so still. The paralysis of the right muscles is only partly recovered, and there is rigidity and contraction of them. There is some escape of fluids from right angle of mouth, and difficulty in eating and disagreeable taste. The right eye is always uncomfortable, and sight rather dim.

CASE II.—A lady, aged 54, while at the seaside in August, 1895, got her hair wet bathing in the sea. Sitting on the parade she felt a chill in her neck, and next day had severe neuralgia of the right face. On August 31st red rash on right supraorbital and temporal regions. Next day she came home, and I first saw her on September 2nd. She then complained of severe neuralgia of the right face; there was a rash of herpes along the supraorbital nerve, and at two places on the temple. The eye was very painful, and a vesicle was on the conjunctiva in the outer lower quadrant; it gave much trouble for a week. September 10th, eye better; severe neuralgia right face, head, and arm. September 13th, neuralgia less; herpes almost well, but leaves scars. At midday she had spasms of the muscles, with frequent painful twitching, drawing the right side of mouth up and outwards. September 16th, less spasm of right face, which has caused much pain and ceaseless annoyance; slight paralysis of the left side of the face. September 24th, neuralgia has ceased, and so have the muscular twitchings. There is tenderness behind and below the right ear, but not of the right fifth nerve. On the left side all branches of the fifth were very tender; so was the seventh in front of the ear, also the mastoid process and the occiput to the spine. October 1st, pains are all better. October 8th, the left side of the face is quite paralysed; she cannot close the eye, and the branches of the fifth nerve very tender. October 26th, less paralysis about mouth; cannot close the eye yet. November 2nd, less paralysis of the left face; some tenderness of the branches right fifth nerve. December 5th, slow improvement both of paralysis and tenderness of nerves on left side. December 28th, face better, mouth more central, left angle rather drawn up and wrinkled as if by spasm of the levator and buccinator; cheek gets between teeth when eating. Cannot quite close left eye, and it has to be occasionally bandaged. All branches of left fifth nerve very tender, and so is the seventh below the ear. From this time she steadily but very slowly improved. In June, 1896, she was able to close her eye completely, food did not escape from her mouth when eating, nor did she bite her cheek. At the present time (June, 1897) the scars of herpes are visible on the right temple, and in the course of the supraorbital nerve; and one (as a dark spot) on the outer lower quadrant of sclerotic. The muscles of the left side of the face are slightly paralysed. There is deficient movement of the lips and angle of mouth and nose; the eyebrow is slightly lower and not so mobile, and the eyelids are not so rapid in closing, nor can their closure be carried to the same extent as on the other side. The paralysed muscles are contracted; the mouth and nose are a little dragged over to the paralysed side, and droop slightly; the naso-labial fold is deepened, and cannot be flattened out; the palpebral slit is narrowed, and the wrinkles about the canthus much more numerous; a little tenderness of the branches of the left fifth nerve, the nasal branch being bad enough to cause her to complain; the seventh nerve is also tender just in front of ear.

The occurrence of the eruption on the right side and the paralysis on the left is apparently unique, and to me unaccountable.

CHARING CROSS HOSPITAL.—As the result of the appeal sent out by the Augustus Harris Memorial Committee, of which H.R.H. the Prince of Wales is a patron, a sum of £2,300 has been received. Of this sum £1,000 has been voted to Charing Cross Hospital for the purpose of founding an Augustus Harris bed for members of the dramatic and musical professions requiring medical assistance.

A CASE OF TRAUMATIC TETANUS TREATED BY ANTITOXIN AND MORPHINE: RECOVERY.

By GEORGE P. GOLDSMITH, M.D. DURH.,
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T. D., an errand boy, aged 16, fell on a gravel path two weeks before the attack and abraded the skin of his extended hand just in the transverse fold between the hand and wrist. He was first seen at 11 A.M. on December 28th, 1896, and the account was that on the previous day he began to feel poorly, and had some stiffness about his jaw and inability to open his mouth. He was in bed lying on his face, and turned with great difficulty. The muscles of the neck were stiff; the back slightly arched; the abdominal muscles relaxed; he could only separate the two rows of teeth for about half an inch. He complained of pain in the masseters and in his back. The bowels had been well relieved. The temperature was normal, the pulse 90. He was given potassium bromide gr. x every two hours.

At 4 P.M. he was lying on his side; risus sardonicus was marked, and the abdominal muscles were rigid. At 7 P.M. there was still much pain in the neck and back. The pulse was 104, the temperature normal. Chloral hydrate ʒj was ordered.

He had a bad night, and at 9.30 A.M. on December 29th the pulse was 108, the temperature normal. Morphine bimeconate gr. ʒ was injected subcutaneously. At 6 P.M. there was considerable opisthotonos and frequent painful spasms of the muscles of the back and limbs, as the result of which he was bathed in perspiration. Thirty c.cm. of fluid antitoxin serum, obtained from Messrs. Burroughs and Wellcome, were now injected in the flanks; also morphine bimeconate gr. ʒ in arm. At 11 P.M. he was still suffering much pain, and had had no sleep. A hypodermic injection of morphine gr. ʒ was given. He was restless during the night, and vomited frequently, the liquid food being violently ejected through his clenched teeth.

On December 30th, at 9.30 A.M., the pulse was 104, and the temperature 99.6°. He was sweating freely; the spasms were frequent, arching the back, but the pain was not so severe, being evidently controlled by the morphine. The pupils moderately contracted. Thirty grains of the solid serum obtained from the British Institute of Preventive Medicine were injected into the buttock, and morphine bimeconate gr. ʒ into the forearm. At 3 P.M. he was lying on his face, and was rather easier. At 7 P.M. the spasms were still severe, but he had suffered less pain during the day. He has been sick at intervals after food. Thirty grains of the solidified serum were again injected, also morphine gr. ʒ. The temperature was 100°, and the pulse 110. He had a restless night, owing to frequent violent spasms. He took a little milk, but swallowing was seriously interfered with by pharyngeal spasm.

At 9.30 A.M. (December 31st) morphine gr. ʒ was given, and repeated at 3 P.M., and again at 9 P.M., when 30 gr. of the solidified serum were again injected. He had been fairly quiet under the morphine during the day. He had some sleep during the night, but the spasms had been still very violent at intervals.

On January 1st, 1897, at 9.30 A.M., morphine bimeconate gr. ʒ was given hypodermically. At 3 P.M. he was easier, and morphine gr. ʒ was injected hypodermically. At 9 P.M. morphine gr. ʒ, and 10 c.cm. fluid serum from Burroughs and Wellcome were injected.

On January 2nd, he had a good deal of pain after 4 A.M., but some restful sleep before this. He took a little egg and milk and beef-tea. At 9.30 A.M. morphine bimeconate gr. ʒ was injected. At 3 P.M., the pain returning sharply, he again had the same dose, as also at 9 P.M., when the spasms were very severe, with profuse sweat and much thirst. He was now injected for the sixth and last time with 10 c.cm. of the fluid serum; he was so emaciated that it was difficult to find a suitable place for the introduction of the needle of the syringe. He had a rather better night, but pain returned sharply between 5 and 6 A.M.

On January 3rd, morphine bimeconate gr. ʒ was injected; 2.30 P.M. he was more comfortable, but looking forward to