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.,
Physician to the Bedford General Infirmary.

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

his dose of morphine, which was given as usual. He was taking liquid food in small quantities, but the attempt to swallow, except soon after the dose of morphine, induced very painful spasms of the dorsal muscles.

January 4th was marked by progressive weakness, though he took rather more nourishment. Quiet opisthotonos persisted with frequent spasms. The same amount of morphine was given, namely, gr. $1\frac{1}{2}$, in three doses during the day. On January 5th, he was evidently weaker; there were sordes on the teeth, and occasional slight delirium. The morphine was given as before.

On January 10th it was noted that there had been little change except a small but perceptible improvement. The tense condition of the muscles persisted, but the spasms were neither so frequent nor so severe. The mid-day dose of morphine had therefore been reduced to gr. $\frac{1}{2}$, and was omitted altogether on this day, gr. $\frac{1}{2}$ night and morning being sufficient to keep "the jumps," as he called them, in abeyance.

On January 12th for the first time he was able to turn on his side without assistance.

On January 13th, as his bowels had not been opened since December 28th, glycerine 3j was injected into the rectum and produced a copious evacuation.

By January 17th there was uniform improvement; he was taking food well; the abdominal muscles still resisted the pressure of the hand; the last morphine injection was given on this night.

I cannot pretend to say what share the antitoxin had in the recovery. The poor lad's sufferings made it absolutely imperative to administer the morphine, and it may be that this enabled him to "tide over" the critical time. Certainly it was the most acute case of traumatic tetanus that I ever saw recover.

I gratefully mention that my Board of Guardians voted, and the Local Government Board allowed, the sum of £3 18s., which the antitoxin cost me, the lad being on my district list.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

IMPACTED GALL STONE: ACUTE HÆMORRHAGIC PANCREATITIS: DEATH.

ON June 14th, 1897, I was asked to see a married lady, aged 59, who had been suddenly seized at 10 A.M. with severe pain in the epigastrium. Except for a little "bilious headache" she had been quite well up to the time of the attack, although for the last year she had suffered a good deal from "biliousness." She had never been jaundiced, and never had an attack of pain like the present one.

I found a stout, well-nourished woman, evidently suffering very severe pain. She was lying half on her back and half on her left side. The pain was chiefly in the epigastrium, radiating into the back. Pressure made the pain worse. The liver dulness was not obliterated, and there was no marked tympanites. The bowels had been open naturally that morning. There was a good deal of retching and some bilious vomit. The urine was scanty, but not very high-coloured. There was no shivering, but profuse sweating. The temperature was 99.2°. I made a provisional diagnosis of gall stone colic, and ordered hot fomentations, and gave a hypodermic of morphine, which afforded considerable relief.

I saw the patient at 10.45 that night, when she said she was much easier. Next morning at 8 A.M. I had a message to say the pain had returned. On arrival I found the patient collapsed, pallid, and evidently suffering from some internal mischief of a serious nature. A dull area could be made out on percussion over the left hypochondrium and spleen. Death occurred at 9.30 A.M. on the same day.

At the *post-mortem* examination, made with the help of my friend, Dr. Travers Smith, the same afternoon, on opening the abdomen a large quantity of blood-stained fluid was seen, evidently proceeding from a deeply engorged pancreas. A

small gall stone was found impacted in the duct, and 13 other stones in the gall bladder itself. The omentum was loaded with fat. I sent a piece of the pancreas to the pathological laboratory of St. Bartholomew's, and Dr. Andrewes reports: "There is no evidence of any new growth, but there is extensive hæmorrhage into the substance of the pancreas."

There seems little doubt that the above case was one of acute hæmorrhagic pancreatitis in association with gall stones. As in some of the other cases recorded, so here: there was a large amount of fat in the omentum and mesentery. The friends said the woman had always been temperate, and had never ailed much, but for the last year had been complaining a good deal of what she called biliousness, but it had never been sufficiently troublesome to lead her to seek medical advice for it. From the rarity of the disease it seems worth recording as an addition to similar cases recently published by Cayley, Keenan, and others.

Brondesbury.

J. ANDERSON SMITH, M.D.Lond.

SEA SICKNESS; ITS CAUSE, AND MEASURES TO BE TAKEN FOR ITS RELIEF.

SEA SICKNESS is caused by a modification of fear, which deprives the heart of its high-pressure power to throw the blood up to the brain. Its functions in consequence become instantly disturbed.

Digestion ceases, as when the pneumogastric nerve is divided. The food then ceases to undergo its normal changes. It speedily acts as a foreign body, which the stomach fortunately expels, preventing putrefactive fermentation. Distressing efforts to vomit may still remain, to relieve which place the person on his back. Elevate both legs and feet higher than the head, and, if necessary, the arms also. The patient should be placed transversely to the ship, and as near the centre as possible.

In the treatment of other maladies, the elevation of the extremities need only be repeated three times a day for half an hour. As the ship is always on the move, however, it may be well to keep one leg elevated for a lengthened period.

The following results will be obtained from elevating the extremities, in a few minutes, say five. The heart will receive again its full supply of blood. High pressure, and the general pressure of the circulation will be restored. The brain receiving again its full supply of blood, its functions will be restored, digestion will recommence, and sickness cease. From the blood receiving a full supply of oxygen, the acidity of the urine is restored, with that also, no doubt, of the gastric juice. The temperature is prone to fall; flannel and hot water bottles should therefore be applied to the body, if necessary. Two ladies on their way to India suffered terribly from *mal de mer*, until they were relieved by this method of mine.

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EXSANGUINEOUS CONFINEMENT.

A MONTH or two ago I attended a Mrs. P. in her second confinement, her first having taken place some twelve years previously. The confinement was in every way a normal one, with the exception that from beginning to end not a dozen drops of blood were lost; at no period was the examining hand stained with blood, and even the placenta and membranes appeared as though recently washed. The placenta had undergone a certain amount of fibrous degeneration, but no calcareous deposits had been formed. The woman was far from anæmic—strong and healthy in every way, and made an uninterrupted recovery. Possibly the fibrin was excessive in quantity, but I have never come across a description of a similar case.

HUBERT C. PHILLIPS, M.R.C.S., M. and L.S.A., etc.

Paddington.

THE Imperial Leopold-Carolina Academy of German Scientists of Halle has awarded the Gold Comenius Medal to Professor von Kölliker, of Würzburg, who recently celebrated the completion of his 80th year and the jubilee of his appointment as Professor.