tions:—Used in probing for splinter (producing feeling of deadness); in probing abscess in the foot, etc. Internally:—Relieved the feeling of thirst on a scorching day, and made the tongue moist. On Tongue:—One side may lose the sense of taste for quinine, the other being unaffected (repeatedly tried); also common sensibility destroyed.

Compared with cocaine, it does not dilate the pupil; it does not stimulate prior to paralysing sensation; it produces no constitutional symptoms when applied to extensive surfaces.

Notes.—Mr. Stanley, M.R.C.V.S., found that sheep might eat it for some time without its causing death, and that, when given in poisonous doses, it causes hoven. This supports my views, seeing that the sensory nerves of the gut are paralysed, secretion as well, and so absorption is in abeyance. One cat I experimented on was paralysed in the extremities; but the dose was very large, and a spirituous solution was used. The stomach, etc., in a cat that had tasted neither food nor water for nine days was natural and free from inflammation, etc.; the blood was natural; the bowels were empty. I have written quite fully enough to show (1) that the drug is a pure anæsthetic; (2) that it is safe; and (3) that it may be used both internally and externally with advantage. For further particulars, I would refer to my more extended articles in the *Australasian Medical Gazette* and the *Chemist and Druggist of Australasia*. I have given only experiences.

AN OBSCURE CASE OF FRACTURE OF THE SKULL.

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ON Monday, November 22nd, 1886, at 9 A.M., a boy, aged 15, was thrown from a horse, which fell whilst running away with him, striking and bruising his forehead and nose and both knees. He was apparently not even stunned, but, after sitting still for two hours, and sleeping for ten minutes, he walked home and spoke rationally to his parents, and, indeed, nothing except the bruising was noticed by them until the afternoon of the following day, when he rather rapidly passed into a state of delirium, with high fever. There was at no time any sickness, nor any bleeding from the nose, mouth, or ears.

Some months previously he had suffered from a troublesome discharge from the nose, which, it was thought, might have been caught from examining too closely a horse that had been tracheotomised for a disease known in the stables as "strangles." This had been treated both in England and in Belgium, and was supposed to have been completely cured.

He was seen by Mr. A. B. Kelly on the afternoon of Tuesday, November 23rd, and at 7 P.M. Mr. Kelly and I saw him together. There was then swelling and bruising about the nose and at the lower part of the forehead, the swelling here occupying the middle line, but extending somewhat more to the left than to the right side. There was also redness, caused probably by the application of some arnica, which strongly suggested the idea of erysipelas; but this proved to be erroneous. There was no marked swelling of either orbit, and no subconjunctival ecchymosis, and there was no swelling in any other part of the head. The left knee was distended with fluid, and evidently was both tender and painful.

He was at this time speechless and almost, if not quite, unaware of what was said to him. He moved all his limbs, except the injured left leg, freely; swallowed food when the feeder was applied to the lips, and passed his water spontaneously, but unconsciously. The pulse was rapid and full, about 120; the respirations also were rapid, but regular; and the temperature 105° Fahr.

We examined carefully both the chest and abdomen, and endeavoured to exclude all other conceivable causes of the fever; and thinking that the swelling of the face might possibly be due to erysipelas, we applied fomentations, and administered a mercurial purge. Next day, as the symptoms remained the same, though the swelling of the face was less, we abandoned the idea of erysipelas, and adopted the diagnosis of meningitis; the hair was accordingly cut short, and ice was applied on the 25th, and from this time forward.

He lived till midnight on November 28th, that is 6½ days after the accident, and, in the interval, the following symptoms developed themselves: The right arm became incompletely paralysed and rigid on the 26th; and the right side of the face, including the upper eyelid, on the 28th; but movements of the right leg were still performed. There was slight spasm of the right facial muscles before he died. The reflexes could not be properly compared, on account of the injury to the left leg; ankle-clonus was marked on the right side. The bruise on the

forehead became very prominent, and seemed to be pointing. The distension of the left knee increased considerably, and a large purplish-brown patch of ecchymosis appeared on the left calf and inner side of the left foot, evidently tender, and most suggestive of blood-poisoning. He continued to take his food; and he passed his water under him. The lips and tongue were dry, and the breath acquired the peculiar earthy smell often met with after head injuries. The pulse and respirations remained rapid; the temperature once sank to 103°, but stood usually at 105°.

No other symptoms of consequence were observed, and we had thus to be content with the diagnosis of meningitis and acute septicæmia, following a presumed fracture of the skull, which was, as far as outward evidence went, a simple one—a condition of things so rare as to make us doubt the accuracy of our conclusion.

A necropsy was made eighteen hours after death, when decomposition was already somewhat advanced. The clot on the forehead peeled off with the scalp, and was, in this situation, quite superficial to the pericranium. It had suppurated, and the abscess thus formed communicated by a narrow track with a patch of bone, from which the periosteum had been stripped off, extending along the junction of the upper and inner walls of the left orbit. This track thus passed round the internal angular process of the frontal bone. On opening the skull, it was found that there was extensive meningitis, more abundant on the left side than on the right. On the right side, it was principally about the base and the temporo-sphenoidal lobe; on the left, it extended up along the fissure of Rolando over the region occupied by the cortical centres of the face and upper limb, but not obviously reaching that of the leg centres. The brain itself was quite uninjured.

There was a small fissured fracture, commencing 1½ inches above the internal angular process of the left frontal bone, and running down to the upper and inner angle of the left orbit, along which it extended as far back as the articulation between the frontal and sphenoid bones—following, in fact, the suture between the frontal and the ethmoid. For some little distance on each side of this, the dura mater had been stripped off; but it was so injured in removing the brain, that it is uncertain whether or not it had been torn at the time of the accident. The fracture communicated with the posterior ethmoidal cells, which contained pus; and it was found, on chipping away the cribriform plate, that the ethmoidal cells and the sphenoidal sinus on the right side also were filled with pus.

The left knee-joint was distended with pus, and there was some bruising on the inner side of the patella itself. The fluid in the calf was clearly inflammatory, but not actually purulent in the part cut into for observation. The viscera were examined without finding any point of interest.

To explain this very obscure case, two hypotheses are possible. First, that which is most likely the correct one, that the fracture, which was really compound, as it communicated with the posterior ethmoidal cells, became contaminated from the secretion of the nose, hence the suppuration of the clot, the septic meningitis, and the general septicæmia, which was indicated by the suppuration of the knee-joint. If we add to this the possibility of some specific poison remaining from the previous attack of inflammation of the mucous membrane of the nose, possibly caught, it will be remembered, from a horse, the exceedingly rapid development of the symptoms becomes comprehensible.

Secondly, it is conceivable that the patient may have been in the state (analogous to that preceding the onset of acute necrosis depending upon injury) when any extravasation or bruising is almost certain to result in an abscess. This not very common condition will be familiar to most surgeons, but it does not, I think, clear up the difficulties of this case satisfactorily.

On the whole, if merely from the point of view of diagnosis, it seems worthy of being recorded. Acute meningitis following a simple fracture of the skull is, I believe, almost unknown; doubtless instances of it have been described, especially before the bearing of the septic element in the production of meningitis was recognised; but it is more than likely that, in these cases, some minute communication with a sphenoidal sinus, an ethmoidal cell, or, perhaps, the external auditory meatus has escaped detection by the observer.

THE *Journal de Médecine* of January 2nd, 1887, contains the following prescription for gastralgia and indigestion recommended by Dacosta. B Bromide of potassium, 8 grammes; calcined magnesia, 6 grammes; cherry-laurel water, 60 grammes; lettuce water, 240 grammes; simple syrup, 25 grammes; extract of thebaïa, 40 centigrammes. Shake the bottle before using. Dose: one tablespoonful before meals.