importance; it is obvious also that it can be easily guarded against in any future case submitted to operation.

In conclusion, it is not necessary for me to dilate upon the strong points of this method of operation, which will be obvious at a glance. Seeing that it can be performed aseptically, it is inconceivable that the formation of the penile urethra should present any difficulty; the very elements of failure are not present.

As to the age at which the operation should be undertaken, its simplicity and ease of performance render it quite unnecessary to wait until puberty, and I should suggest the age of about 8 years as being the most suitable. The great benefit of such early operation will be appreciated at once when we consider that the time intervening between 8 years and puberty might well be a period of great unhappiness and mental injury to a boy afflicted with such a deformity.

I confidently submit to the profession this operation, which I honestly believe will be found to have inaugurated a new era of hopefulness for the relief of the unfortunate victims of this dreadful malformation.

The illustrative diagrams have been executed from my description by a skillful and intelligent lay friend. For the photograph of my patient I have to thank my colleague, Dr. Herbert Hewlett.

A CASE OF SEVERE SUBCRANIAL HÆMORRHAGE: OPERATION: RECOVERY.

BY

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History.—S. S., a married woman, aged 56, of intemperate habits, was found on the night of September 8th, 1899, lying unconscious outside a public-house, and was removed home in a barrow at about midnight. The following morning she regained consciousness, and with the assistance of her husband was able to walk to the closet. On returning to bed she complained of pain in the head, and gradually became very drowsy. During September 10th this drowsiness passed into unconsciousness. As the unconsciousness supervened it was noticed the left arm and then the left leg became impaired as regards movement. These facts were elicited from the husband by Dr. Proudfoot, who was summoned to see the patient on the evening of September 10th. Dr. Proudfoot held a consultation with Mr. Farmer, and on both agreeing that it was a case of subcranial hæmorrhage, the patient was transferred to the Radcliffe Infirmary for immediate operation.

Condition on Admission.—Well nourished; slightly obese. Well-defined bruise over right parietal eminence. No fracture to be felt. Some slight bruising over right shoulder and hip. (No evidence as to how she came by these bruises.) Completely unconscious. Breathing deep, slow, and stertorous. Pulse full, regular, 107 per minute. Paralysis of left arm and leg; no facial paralysis discernible. Pupils equal and dilated, giving no reaction to light. No paralysis of ocular muscles to be made out. Temperature 97.2°.

Operation.—The patient was at once prepared in the usual way for the operation of trephining and removed to the theatre. Chloroform having been administered, a large semicircular flap was made on the right side of the head. This flap measured about 3 inches by 3 inches, the centre of the base being approximately 1 inch above the external auditory meatus and included the bruise. Everything down to the bone was reflected in the flap. It was noticed that the tissues were distinctly ecchymosed, but on examining the underlying bone no trace of fracture could be found. A $\frac{1}{2}$ inch trephine was then applied, its centre corresponding to a point about $\frac{1}{2}$ inches above the zygoma in a vertical line running immediately in front of the external auditory meatus. On the removal of the crown of bone (which was placed in sterilised saline) a large clot bulged into the wound. Almost instantaneously the stertorous character of the breathing ceased. The clot on exploration was found to extend beyond the trephine hole in all directions but one, namely, the lower. The whole of it was easily scooped away without enlarging the opening. A large depression in the convexity of the brain presented itself and the dura did not bulge to its normal level. Hæmorrhage was very free coming, not from any single vessel, but from several. Where possible, these were picked up with fine pressure forceps, and tied. Some vessels had to be tied by passing fine sterilised silk with a curved Hagedorn needle through the thickness of the dura mater. There was still some oozing, however, and, as the depression showed no signs of bulging out, the hole was gently packed with sterilised gauze, and the edges of the skin brought together by means of temporary silk sutures without replacing the bone. A plain sterilised dressing was then applied, and the patient removed to the ward.

After-History.—September 11th. Consciousness returned. Some movement of left leg. General condition good. Temperature 98.4°, rose to 100° in the evening. Pulse rose from 68 to 104, respirations 20. September 12th. More power in leg. Plugging removed; dura well up to its proper level. Skin flaps sutured with silk. Temperature normal, pulse 80, respirations 20. September 13th. Movement in left arm began to return. September 16th.

Sutures removed. Wound healed completely. From this time the patient made a perfect recovery, regained complete power over left arm and leg; left hospital on October 14th.

REMARKS BY DR. PROUDFOOT.

I saw the case for the first time on Sunday evening, September 10th, 1899, and the points which enabled me to come to the diagnosis of subcranial hæmorrhage were the recovery of the patient from the original unconsciousness, which I attributed to the concussion caused by the injury, the gradual return of the unconsciousness after some exertion, due this time to compression, and, as has been already stated, the discovery on examination of the head of a well-defined bruise over the right parietal eminence.

REMARKS BY MR. FARMER.

The symptoms in the above case clearly pointed to hæmorrhage from the anterior branch of the middle meningeal artery rather far back, causing compression over the mid-Rolandic area, spreading upwards. The bruise practically corresponded with this region. I was thus guided with regard to the point of application of the trephine. The above case would have been admirably adapted for opening the skull by Wagner's method, namely, reflecting a flap of bone with the skin, and thus preserving the anatomical relations between the outer table of the bone reflected and the skin. My reason for not adopting this method was simply the fact that I had not a suitable osteotome at hand. I have on several occasions seen Wagner's method performed on the Continent with a chisel, and cannot help feeling that the vibration thus produced must be harmful, especially in a case of subcranial hæmorrhage. The most troublesome part of the operation was the stopping of hæmorrhage, and at one time I felt inclined to trephine over the main trunk of the middle meningeal artery. By adopting the method of passing fine silk sutures through the dura, where one could not pick up the bleeding point, I was finally, however, able to reduce the bleeding to a slight general oozing. It was obviously essential to plug the large depression in the brain, owing to this oozing; for this reason I did not feel justified in replacing the crown of bone. If the bone had been replaced it would have been resting for twenty-four hours upon gauze and covered by skin. It would then have been removed and replaced during the first dressing when the gauze was removed. I think it very doubtful whether under these conditions it would have retained its vitality. The patient was shown before a Branch meeting of the British Medical Association about three months after the operation. The trephine area was marked by a slight depression in which the pulsation of the brain could be seen and felt. There was absolutely no sign of any yielding of the cicatrix, and the patient stated that she felt as well as she had ever done in her life.

NOTES OF TWO CASES OF EXCISION OF THE GASSERIAN GANGLION FOR EPILEPTIFORM NEURALGIA.

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THE two following cases illustrate the value of the operation for excision of the Gasserian ganglion in cases of epileptiform neuralgia. Along with the cases recorded by Mr. Victor Horsley, Mr. Hartley, Mr. Krause, and Mr. Jonathan Hutchinson, jun., they encourage us to hope that one of the most severe complaints can now with safety be relieved:

CASE I.

History.—A. B., aged 57, was placed under my care by Dr. Haldane, of Bridge of Allan, and Dr. White, of Stirling. He had suffered for seven years from increasingly severe attacks of epileptiform neuralgia of the left fifth nerve, so much so that he sometimes had as many as thirty attacks in the hour, with spasm of the left arm, and he was compelled to be kept under large doses of morphine, having sometimes 4 grs. daily. Professor Chiene and Dr. Beatson saw him also in consultation, and we were all agreed that the only operation which would permanently relieve him was removal of the Gasserian ganglion. He had the typical appearance during the attacks of pain with convulsive spasm of the facial muscles and depressors of the lower jaw, invariably covering his face with his left hand to try and stop the spasm, the left hand twitching during the attack.

Operation.—In November, 1898, assisted by Dr. Beatson, Dr. Bryce, Dr.