

it is necessary to excise the bone, yet our experience does not support this theory. The loss of blood is slight and the bone can be very quickly cut away with forceps.

The left lateral portion of the sacrum has been removed up to the fourth sacral foramen without impaired function. Higher resections are likely to result in permanent damage to the bladder on account of nerve injury.

It may perhaps be said that this case does not show the difficulties usually met with in the disease.

This to a certain extent is perfectly true, but it does nevertheless serve to illustrate the advantages to be gained by this operation and the ease and accuracy with which the bowel may be brought into view.

### POSTURAL TREATMENT FOR NOCTURNAL ENURESIS.

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I BEG to offer the following report, as illustrating the application of the postural treatment for nocturnal enuresis proposed by Dr. Stumpf (*Münchener med. Wochenschrift*.) to which reference is made in the JOURNAL's editorial of July 4, 1895.

The history shows that the patient, a female, when five years of age, had scarlatina. Subsequently, nocturnal enuresis had been continuous, until she was in her fifteenth year. She was then an averagely healthy child, but with an organization inclining toward the so-called lymphatic temperament. Various remedies had been tried without apparent benefit. About this time the article referred to was seen by the writer; and the means therein recommended were at once adopted. They were used each night for about two weeks, no nocturnal enuresis taking place. The remedial measures were omitted one night, and the trouble reappeared. The treatment was renewed and kept up for three weeks with success. Nine months have since passed, and the patient states that there has been no recurrence.

An ordinary excelsior-filled pillow, five inches thick, was used under the hips (causing very little discomfort) to maintain the necessary elevation. No disturbance of the usual functions of life was manifest. Menstruation has been normally established.

In the "postural" treatment, enuresis being attributed to irritation, during sleep, of the neck of the bladder by normal urine, the hips should be raised enough to partially invert that organ, allowing the secretion to accumulate in the dependent portion of the viscus, thus obviating the pathologic excitation of the organ.

INDUCED LABOR IN A CASE OF PREVIOUS CÆSAREAN SECTION. — Dr. Schlaepfer reports, in a recent number of the *Centralblatt für Gynäkologie*, the case of a woman who had been delivered of a dead child by Cæsarean section at her first pregnancy, but at the second, a year and a half later, premature labor was induced during the ninth month, and a living child was delivered by version. The case was one of simple flat pelvis of the first degree. After the uterus had contracted, a depression was felt on its surface, which was supposed to be the scar resulting from the previous operation.

## Medical Progress.

### RECENT PROGRESS IN SURGERY.

BY H. L. BURRELL, M.D., AND H. W. CUSHING, M.D.

(Continued from No. 19, p. 465.)

#### THE RESULTS OF OPERATIVE TREATMENT OF INJURY OR DISEASE OF THE CERVICAL VERTEBRÆ.

MR. VICTOR HORSLEY<sup>1</sup> read a paper on this subject. The cases on which the paper was based were seven in number, and in each laminectomy had been done for caries or for fracture. All the patients recovered. Case No. 1 was admitted to the hospital in 1888 with caries of the atlas and axis. There was complete paralysis of all four limbs, and the skin was dusky from interference with respiration. The arches of the atlas and axis were removed. Power began to return on the sixth day. The patient is now well except for some wasting of the interossei. In Case No. 2 there was caries of the fifth and sixth cervical vertebræ, weakness of the intercostal muscles and of the lower limbs. There was no sensory paralysis. Laminectomy of the affected vertebræ was performed, and the patient recovered. In Case No. 3 there was caries of the lower cervical vertebræ, with complete paralysis in the legs and right arm, and a little power in the left arm. The vesico-rectal centre was interfered with, laminectomy of the third to seventh cervical vertebræ was performed. On the third day some return of power was noticed, but this was only ephemeral, and very little further progress was made. Three months afterwards the patient left the hospital, and a month later died. In Case No. 4 there was fracture of the cervical spine, with paralysis of all four limbs, which had lasted eight months. The paralysis began to extend. Analgesia was present, and this always points to an affection of the central gray matter of the cord. The laminae of the fifth and sixth cervical vertebræ were removed, and the thick fibrous tissue was dissected off the dura mater. The patient steadily improved, and only wasting of the interossei remained. In Case No. 5 the patient had fallen from a cart, striking his head and right shoulder. He walked about for a week, but gradually lost power in all his limbs. When admitted to Queen's-square Hospital, fracture of the sixth cervical vertebræ was diagnosed. The left optic disc was swollen. Laminectomy of the fourth, fifth and sixth cervical vertebræ removed a ridge which had been pressing on the spinal cord. Power began to appear on the twelfth day. He has since recovered completely. In Case No. 6 the patient sustained a fracture of the sixth cervical vertebræ; the onset of paralysis was gradual. There was marked contracture and well-marked anesthesia of the post-axial border of the upper limbs. The arches of the sixth and seventh cervical vertebræ were removed, when a projecting ridge was felt, but on extension this disappeared. He is recovering slowly. In Case No. 7 the patient had struck the fore part of his head, and after walking 200 yards rapidly, became completely paralyzed. After partial recovery spastic paraplegia appeared, with post-axial anesthesia of the upper limbs. The laminae of the sixth and seventh cervical vertebræ were removed. Permanent recovery commenced three weeks after the operation. He now can walk a

<sup>1</sup> Lancet, August 17, 1895, vol. II, p. 437.