STRANGULATED INGUINAL HERNIA. HERNIOTOMY. CONTENTS OF SAC FOUND TO BE CANCEROUS. RELIEF OF SYMPTOMS.¹

BY S. J. MIXTER, M.D.

MR. Y., a patient of Dr. Norton, of Walpole, a farmer, fifty-five years of age, had had an inguinal hernia for a great many years and was able to keep it in place by means of a truss, and, when it did come down, could easily reduce it himself.

Forty-eight hours before I saw him his hernia came down suddenly while he was lifting. He could not reduce it, and after keeping quiet for twenty-four hours, sent for a physician. Attempts at reduction, both without and with ether, proving unavailing, the foot of the bed was raised and ice bags placed on the hernia. I saw him the next day. He was then suffering severe pain in the tumor; there was considerable pain and tenderness of the abdomen with some distension. There had been no movement of the bowels since the descent of the hernia, and there was constant nausea and occasional slight vomiting. The right scrotum and inguinal regions were red, swollen and tender. The patient was etherized and attempts at reduction being unsuccessful, it was decided to perform herniotomy. The symptoms were not particularly urgent, but had been growing steadily worse for twenty-four hours, under the best conditions for their relief.

The tumor was not resonant in any part. On opening the sac no fluid escaped, and a mass was found filling it which resembled neither omentum nor bowel, but which seemed more like a much-thickened sac, within the first. It was entirely irreducible and somewhat congested. On cutting into this mass a small cavity was opened and a small amount of jelly escaped. On introducing the finger more jelly and a large number of small grape-like masses were found to fill this and adjacent cavities. The tumor being adherent, was separated as far as the much enlarged ring, but after enlarging the ring and passing the finger round the neck of the tumor, it could not be reduced and was ligatured and removed as high as possible, the removed mass resembling in size and shape a large pear. The finger passed through the ring could feel a large mass passing backwards and upwards into the abdominal cavity and apparently firmly fixed. Symptoms of strangulation were entirely removed by the operation and the patient did well for about ten days, only a slight amount of pus escaping along the drainage-tube tract, when distention of the abdomen and a high temperature appeared and the patient died. The probable cause of death was peritonitis, perhaps caused by sloughing of the pedicle of the tumor left in the ring, its structure being such that a necrosis might easily take place in the mass.

The tumor was examined microscopically by Dr. W. F. Whitney, who pronounced it colloid cancer.

— M. Pasteur's recent proposition to extirpate the rabbits which infest New South Wales by the introduction of the chicken-cholera microbe, is strongly opposed by a government official who asserts that the proposition involves greater danger than the pest it seeks to remove.

¹ Read at the meeting of the Surgical Section of the Suffolk District Medical Society, February 1, 1888.

THE REIMPLANTATION OF A TREPHINE BUTTON OF BONE.¹BY HERBERT L. BURRELL, M.D.,
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It would seem that the credit of introducing the important step of replacing a trephine button of bone in the skull belongs to William MacEwen,² and its full significance has perhaps not been fully appreciated, for if it is possible to replace bone that has been completely divided from all its attachments, especially from its periosteal covering which has always been considered to be so important for its life and growth and to feel assured that it will live, places upon a definite practical, working basis bone-grafting which may well become one of the great possibilities of surgery.

MacEwen in 1885, stated that he had reimplanted the fragments of divided trephine buttons, in eleven cases, only twice did the replacement fail, and in these two cases the majority of the fragment lived.

The able paper of MacEwen upon "Osteogenic Factors in the Development and Growth of Bone,"³ which has recently appeared, is evidently the result of mature thought upon the subject of bone-growth, and accepting for the time MacEwen's experiments and many of his conclusions, we are lead to conclude that the periosteum is no longer the principal seat of bone-growth but to deem it simply an investing membrane which supplies a comparatively small amount of nutriment to the bone. The medulla is also shown to have but little to do with the growth of bone, in fact, the osteoblastic cells are believed by MacEwen to be capable of reproducing themselves. These statements at first are somewhat startling but we are beginning to receive accounts of successful efforts at bone-grafting, and this specimen which I have been fortunate enough to secure, has seemed to me of enough importance to place upon record. The trephining was an exploratory one done on a boy aged thirteen, to determine the presence or the absence of a depressed inner tablet of the skull that might have accounted for a group of existing cerebral symptoms. Operation: the child was etherized and the localization lines were drawn by Dr. W. N. Bullard; a large semilunar incision was made with the base downward, including the cicatrix; a second incision was made through the periosteum, and this was completely and freely elevated from the bone, which was then removed with a large trephine; no fracture was detected, and no abnormal appearance of the dura mater was found; an exploratory puncture with a trocar was made into the cerebral substance in the direction of the median portion of the ascending frontal convolution, entering perhaps four inches — no result. The bone which had been carefully preserved in an antiseptic solution was then carefully replaced in the skull, the periosteal flap was secured in position by a fine continuous catgut suture, and the overlying structure were similarly dealt with. Drainage being secured in the scalp by a dozen or more strands of catgut; an antiseptic dressing was applied and the recovery from a surgical standpoint was uneventful. When the dressing was first removed at the end of two weeks, the wound was found completely united; for a short time after this a dressing was kept on the boy's head as a protection against any injury to the recently

¹ Read before the Surgical Section of the Suffolk District Medical Society, Feb. 1, 1888.

² *Lancet*, May 16 and 23, 1885.

³ *Annals of Surgery*, Oct. and Nov., 1887.

repaired structures. The child's cerebral symptoms gradually grew worse, and he finally died in the Boston Lunatic Hospital, in December, at the expiration of nearly eight months after the trephining, and for the specimen I am indebted to Dr. W. N. Bullard. (See cuts.) The trephine button has completely

I. Outer Surface.

II. Inner Surface.

united by bony union throughout its circumference, and is perfectly firm in its position; it rests in a plane a little below that which it formerly occupied, and is a little whiter than the surrounding bone structure; there has been raised from the external surface of the bone the overlaying periosteum (Cut I.) in order that the condition of the reimplanted button might be observed.

The important lesson which this specimen seems to teach, is that hereafter one should regard the removal of a trephine button in the same light as an exploratory incision through the abdominal walls, since in each case it opens up a very important field for exploration, which can be again closed by reuniting the abdominal walls or by replacing the trephine button.

— A Chicago congressman has lately introduced a bill in the House of Representatives which provides for a penalty to be inflicted on persons bringing infectious diseases into the United States, authorizes the supervising Surgeon-General of the Marine Hospital Service to build a laboratory, and repeals the act creating the National Board of Health. The bill is put forward, it is said, in order the more easily to kill the bill establishing a Bureau of Public Health.

— A Liverpool daily paper contained (January 27th) the following advertisement: "Wanted at the end of February, a nurse able to bottle a baby."

A CASE OF NECROSIS OF THE TEMPORAL BONE; REMOVAL OF THE LABYRINTH; RECOVERY.¹

BY FREDERICK L. JACK, M.D.,
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THE patient was first seen by me at the Children's Hospital in consultation with Dr. H. W. Cushing, who gave the following history:

Willie B., eight years of age, was brought by his mother to the hospital on August 24th for the relief of pain in the left ear. An examination showed the following condition: The left meatus filled with a purulent and offensive discharge. A polypoid mass springing from the posterior upper portion of the canal close to the outer orifice, prevented an inspection of the condition of the middle ear. There was paralysis of the muscles of the face on the left side. The region of the mastoid was red, swollen, and there were distinct signs of fluctuation.

The patient was etherized and a free incision made down to the bone, evacuating a quantity of pus. A small piece of dead bone was discovered about on a level with the superior wall of the external meatus, which was readily removed, and the probe found to pass into the mastoid an inch. The polypus was snared off. The wound of incision was dressed and the patient kept in bed. The head symptoms were partially relieved for a few days by the operation, but the otorrhœa continued, accompanied now with free discharge from the wound behind the auricle.

September 1st. The case was referred for treatment to the Massachusetts Charitable Eye and Ear Infirmary. The polypus which had reappeared was removed, revealing the condition of the middle ear. The membrana tympani was found entirely destroyed, and the tympanic cavity filled with granulations. The malleus and incus were absent. Probing discovered no necrosis either in the middle ear or in the post-aural sinus to the depth of an inch. The ear and wound were frequently syringed with solutions of permanganate of potash and boric acid. While syringing into the sinus, water freely passed into the meatus from the inferior wall of the tympanic cavity. Under treatment all symptoms diminished, and at the end of ten days the mother was requested to bring the boy as an out-patient. She neglected to attend till October 20th. In the meantime the post-aural swelling had alternately subsided and reappeared. The pain in the ear and mastoid for a few nights was intense. Under ether, the wound previously made behind the ear, which had partially closed, was enlarged, and dead bone readily felt with the probe at the depth of an inch and a half. The sequestrum resisted gentle attempts for its removal, and considering the relation of the bone to the cranial cavity, and the liability of dangerous hæmorrhage, it was decided not to use force, but to allow it to separate by natural processes. The patient remained in the Infirmary for a week, and during the time suffered very little pain, an anodyne being required but once.

The case now passed from observation until November 17th. At this time the auricle was standing far out from the head, and the swelling over the mastoid had extended farther down the neck. The purulent process was active, and the ear and wound freely discharged.

¹ Read at the meeting of the Surgical Section of the Suffolk District Medical Society, Feb. 1 1888.