The ejector will sometimes be found of great value in the treatment of wounds after operation, especially in bladder cases. Mr. H. Herring informs me that he has derived the greatest assistance and his patients the greatest comfort from it after suprapubic cystotomy. His method of using it is to wrap the end of the ejector tube with gauze and put it into the bladder. The gauze has the double function of collecting the fluid for removal through the tube, and of providing an inlet for air, so that the inside of the bladder is never subjected to negative pressure. The patient is entirely unconstrained as to posture, and his dressings remain perfectly dry.

I have myself used the instrument in precisely the same way to remove saliva after a plastic and grafting operation on the mouth, and with the best results.

I think every operating theatre and hospital ward should be supplied with this instrument as part of its equipment. No one who has once had experience of its advantages would willingly do without it either during operation on, or the subsequent treatment of, those cases for which it is suitable.

THREE CASES OF CEREBELLAR ABSCESS.¹

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SUPPURATION in the temporal bone may extend backwards into the posterior cranial fossa along three paths—through the lateral sinus, through the labyrinth, or through the triangular area of bone bounded above by the superior petrosal sinus, in front by the posterior semicircular canal, and behind by the lateral sinus.

The relative frequency with which the infection spreads through the last-named area is of considerable clinical importance, and an investigation of twenty-three cases of cerebellar abscess which have occurred in the Aural Department of the General Infirmary at Leeds during the last few years shows that in nine cases the path of infection lay through the area above mentioned, the lateral sinus and internal ear being unaffected.

Three cases of cerebellar abscess have come under my care during the last few months, and two of these show the importance

¹ Communicated to the Otological Society of the United Kingdom, February 5, 1906.

of a careful investigation of the condition of the bone in this locality.

The first case was that of a child aged five years. For two years there had been continuous otorrhœa on the right side, for fourteen days there had been headache, pain in and about the ear, and for two or three days drowsiness, with some tenderness over the mastoid process, but no vomiting, convulsions, or any affection of the eye, trunk, or limb-muscles.

When first seen the temperature was 99° F., pulse 96, and respirations 27. The auditory canal contained foul pus, and the middle ear could not be seen owing to the depression of the superior meatal wall.

The radical operation was performed and extensive bone-disease found. The disease extended backwards through the triangular area above mentioned, and a small extra-dural abscess was discovered. Further search revealed a small, ragged perforation in the dura mater communicating with an abscess in the cerebellum containing about 2½ drachms of pus. The dura was more freely opened and the abscess cavity drained. The drowsiness and headache passed off in two days, and the further progress of the case was uneventful and completely satisfactory.

The second case was that of a girl aged sixteen. When five years old she had measles associated with corneal ulceration and otorrhœa. Both eyes were quite destroyed by the corneal suppuration, and although the left ear ceased to discharge otorrhœa persisted from the right.

Four days before her admission into hospital she had a convulsion, with loss of consciousness, lasting two or three minutes, and during the following days she remained heavy and drowsy, with occasional attacks of vomiting. During the six hours preceding her admission she became rapidly worse, and when admitted was almost moribund and quite comatose.

There was an offensive right otorrhœa, but no external mastoid signs, no nystagmus, no paralysis or rigidity of the limbs, and the knee-jerks could not be obtained.

The radical operation was performed, and on removing the cortex extensive disease was found. The bone was almost black and the pus very offensive. The disease extended back through the triangular area, and a small extra-dural abscess was found. The cerebellum was explored and an abscess, containing about a drachm and a half of pus, opened and drained. Consciousness was never regained, and death occurred ten hours later.

Both these cases clearly demonstrate the importance of a careful search, in all cases of temporal bone disease, of the triangular area above indicated, and the frequency with which infective processes will select this track.

The third case is of considerable interest since both the temporo-sphenoidal region and the cerebellum were affected. A double lesion of this kind is rare. In fact, amongst our records of twenty cases of temporo-sphenoidal abscess and twenty-five cases of cerebellar abscess suppuration in both regions has only been recorded in one other case.

The patient was a boy aged eight. Otorrhœa had been present on the right side for three weeks. For seven days there had been headache, drowsiness and frequent vomiting. No vertigo, nystagmus, or rigors had been observed.

When first seen he was very drowsy, but could easily be roused and answered questions intelligently. The pupils were equal and reacted readily, and no optic neuritis was present. No paralysis of the trunk, limb, or face muscles was present, and the knee-jerks were absent. The temperature was 98·4° F., pulse 90, respirations 16. The right auditory canal was filled with pus, and a perforation could be seen in the lower portion of the drum; no mastoid signs were present.

The radical mastoid operation was performed and extensive bone-disease discovered. The tegmen antri was diseased and the exposed dura mater inflamed. The temporo-sphenoidal lobe was explored and a small abscess opened and drained. There was gradual improvement for about a fortnight, the boy's mental condition being considerably better, and vomiting ceased. A large amount of pus was discharged from the cerebral abscess. The improvement was not maintained, and twelve days after the operation double optic neuritis was observed for the first time, although the eyes had been examined every other day. Large quantities of pus continued to come away from the abscess, together with fragments of breaking-down brain substance. Three weeks after the operation vomiting returned, and further exploration of the temporo-sphenoidal lobe opened up another abscess. The patient however, gradually got worse, and died five weeks after the first operation, no further localising signs or symptoms having developed.

At the *post-mortem* examination a large abscess cavity in the temporo-sphenoidal lobe and an unopened and unsuspected abscess in the right lobe of the cerebellum were found. The lateral sinus

was healthy and the triangular area of bone showed no disease. There was opacity of the pia mater in the neighbourhood of the internal auditory meatus, and a further examination of the temporal bone showed that the path of the infection lay through the internal ear and internal auditory meatus.

The rate of mortality in cases of cerebral abscess is, I believe, considerably higher than a study of the text-books would indicate. The only reliable statistics are those to be obtained from the various hospital Reports.

I have not been able to make an exhaustive search, but during the five years up to 1904 in the "St. Thomas's Hospital Reports" there are recorded 19 cases of temporo-sphenoidal abscess, of which 12 died, and 7 cases of cerebellar abscess, of which 6 died, and 2 cases of combined temporo-sphenoidal and cerebellar abscess, both of which were fatal.

In the "St. Bartholomew's Hospital Reports" for the same period 17 cases are recorded, the proportion of cerebral and cerebellar abscess not being stated. Of these 15 were fatal.

Our own statistics at Leeds for the last six years record 10 cases of temporo-sphenoidal abscess, of which 5 died, 9 cases of cerebellar abscess, of which 6 died, and 2 cases of combined temporo-sphenoidal and cerebellar abscess, both of which were fatal.

SOCIETIES' PROCEEDINGS.

PROCEEDINGS OF THE PARISIAN SOCIETY OF LARYNGOLOGY, OTOTOLOGY, AND RHINOLOGY.

Meeting held January 12, 1906.

DR. G. GELE *in the Chair.*

LARYNGOTOMY WITHOUT CANNULA.

BY DR. A. CASTEX.

The author narrated two recent cases of laryngotomy performed on account of epithelioma and syphilitic condylomata, which he had been able to carry out successfully without employing the tracheal cannula, either during or after the operation. He considers, in fact,