INTRACRANIAL ABSCESS FROM DISEASE OF THE MASTOID CELLS, CURED BY OPERATION.

By FRANK BUSZARD, M.D.Lond., F.R.C.S., Northampton.

MRS. S., aged 40, when first seen by me on April 21st, 1869, had suffered for about eighteen months from most distressing headache, confined to the vertex and right side of the head, and more recently from neuralgia of the right side of the face. Six months before I saw her, an abscess had formed behind the right ear, and had been opened; since which time a succession of abscesses had continued to form and discharge at various times, little or no relief following. There had been frequently, and before any severe symptoms showed themselves, a watery discharge from the right ear, and slight deafness, gradually increasing. The pain in the head and face was stated to be rarely or never absent altogether; it was especially aggravated at night, and frequently so intense as altogether to prevent sleep, and oblige the patient to walk about her room to obtain some temporary relief. Every treatment had failed to do more than slightly alleviate.

Examination showed an abscess over the right mastoid process, and so much deafness of the right ear that the watch could not be heard at a distance of more than two inches. The pain which, judged by the patient's condition, was evidently most severe, extended from just above the external ear to the vertex. There was no tenderness; but, on the contrary, a feeling of numbness or deadness was complained of when the part was touched. The pain radiated along all the branches of the fifth nerve, accompanied by spasmodic movements of some of the muscles, especially of the right orbicularis palpebrarum. The pupils were natural; but the right eye was very sensitive to bright light. The pulse was normal, and the appetite was good; but there had been occasional attacks of vomiting. The membrana tympani was entire. It was obvious, from the general symptoms, and from the seat and character of the pain, that the dura mater was implicated in the disease.

On May 4th, having given chloroform, I made a free incision down to the bone at the back of the ear; and, though there was no apparent disease of the bone, this considerably relieved the pain as long as it remained open and discharging, but subsequently the case resumed its former untractable course. Being fully satisfied that there was a formation of pus either within the mastoid cells or outside the dura mater, I proposed to set it free by trephining; but to this the patient was disinclined to submit, till, the symptoms becoming much more urgent, the pain nearly constant, and very frequent vomiting with total loss of appetite and much drowsiness and oppression of brain being added, she finally consented; and I operated on September 1st. Chloroform having been administered, I exposed the bone fully by a free crucial incision, cutting through the attachment of the sterno-mastoid muscle. The bone looked dry, and gave scarcely any blood when scraped with a gouge. On examining it with a probe, I observed a small opening just above the mastoid process, and was able to pass the probe (a small steel one, without a bulbous extremity) into and through it to the interior of the cranium, and found a drop or two of pus following its withdrawal. Over this part I applied a small trephine, and, having removed the outer table of bone with it, completed the operation with chisel and forceps, so as to avoid injuring the lateral sinus. At least an ounce of viscid inodorous pus escaped, the greater part of which was collected. The opening in the bone was about a quarter of an inch in diameter. A director passed in without meeting any resistance for at least two inches, and the dura mater was not observed pulsating. There was much bleeding from small arteries in the sterno-mastoid muscle, which were with difficulty secured, and this made the operation long and troublesome. The wound was left open in the centre, the extremities being secured by sutures.

On the following morning, the pulsations of the dura mater at the bottom of the wound were readily observed. There had been a very free escape of pus, and at the same time all pain had ceased.

The patient made an almost uninterrupted recovery, though at one time during the healing of the wound the opening became obstructed by granulations, and pain returned. It was immediately removed, however, by passing a director through the opening in the bone, and restoring the channel for discharge. The director required passing every morning for some weeks; and subsequently the fistulous opening, discharging more or less freely, remained patent till January 1870, nearly four months after the operation, when it finally closed; since which time the patient has remained well.

The above is a good example of a generally fatal class of cases, and I am not aware that perforation of the bone has previously been practised as a means of treatment, though I find it spoken of as likely to afford relief by the late Mr. Toynbee, in his work on *Diseases of the*

Ear. To the gradual escape of pus through the enlarged venous canal in the bone, must be attributed the length of time which elapsed before the more urgent symptoms showed themselves, and the discovery of this orifice indicated the appropriate spot for the application of the trephine.

The peculiar sensation of numbness or deadness complained of on gently striking the side of the head, appeared to indicate a separation of the dura mater from the bone; and to the implication of the branches of the fifth nerve to the same membrane, the secondary neuralgia of its facial branches was plainly attributable.

CLINICAL MEMORANDA.

FATAL PULMONARY HÆMORRHAGE.

DR. POWELL cannot have read the record of my "Case of a rare form of Pulmonary Hæmorrhage" very carefully, otherwise it is difficult to imagine how he could have fallen into some of the errors contained in his note in the *JOURNAL* of last week. In the first place, he says my "opinion as to the source of hæmorrhage is doubtless the true one; viz., that it occurred through rupture of a dilated branch of the pulmonary artery in a cavity." If Dr. Powell will read the case again, I am sure he will find that I expressed no such opinion, for my own impression is that no cavity existed prior to the rupture of the aneurism, but that the one found *post mortem* was produced by the destruction of the lung-tissue by the extravasated blood. This also is Niemeyer's view of the nature of such cases.

Again, Dr. Powell says "I am unable to agree in the view that atheroma of the vessel may have been the primary cause of its dilatation. Atheromatous disease of the pulmonary artery or its branches is of very rare occurrence". Granted that the statement in the last sentence is correct, I still do not see why atheroma of the vessel should not have existed in my case, which I regard as one of exceptionally rare occurrence. No one regrets more than myself that the vessel was not examined more carefully; still I think that the existence of atheroma in the aorta, and the similarity of my case to those mentioned by Niemeyer, and one recorded in the *New York Medical Journal* for September 1870, substantiate the view I took of the pathology of the case.

In conclusion, I must remind Dr. Powell that the history of the case previous to the hæmoptysis altogether militated against the existence of a vomica, or indeed of any pulmonary or cardiac disease. Dr. Powell refers to the *JOURNAL* of November 19th for some cases of fatal hæmoptysis recorded by himself. May I ask Dr. Powell if December 3rd should not be substituted for November 19th?

J. B. BRADBURY, M.D., Physician to
Cambridge, Jan. 21, 1871. Addenbrooke's Hospital.

GUN-SHOT WOUND: WITH REMARKS ON THE EFFECTS OF ANTIMONY, Etc.

LAST Christmas I was summoned to see a farmer's son, who had received a gun-shot wound in the following manner. He was out with his younger brother, and, having got over a ditch without his gun, asked the other to hand it to him. While he was in the act of doing so, one of the barrels accidentally went off, sending its contents through the muscles of the chest down to the ribs a little above the left nipple, whence the shot glided to the left, passing under the anterior boundary of the axilla, riddling through it and making its exit by two distinct wounds between its base and posterior wall. The gun was loaded with small shot—No. 6, I believe—and a full charge of powder. The muzzle must have been pointing almost straight at the lad, and was from half-a-yard to a yard distant from him at the instant of the discharge. There was a good deal of shock; suppuration set in in due course, shots came away from the wounds, etc.

On the third day symptoms of an inflammatory nature presented themselves; quick, hard, bounding pulse, rigors, and delirium. I at once ordered antimony in nauseating doses, combined with a little Dover's powder. In twelve hours it acted like a charm. The fever was gone, and sleep procured. From that time till the wounds healed—only a few weeks—there was not a bad symptom. The dressings all along were of the simplest kind. It is worth notice that, as far as we could judge, no shots entered the chest; and that there was little hæmorrhage.

In giving antimony, in whatever dose, or for whatever purpose, whether as a diaphoretic, emetic, epispastic, expectorant, sedative, or contra-stimulant (Neligan's division), I feel more assured every day that the greatest care and watching are required. It will do any amount of