

followed, which was stopped after a good deal of trouble, by continued pressure with the sponge.

30th.—The varicose appearance of the arteries had almost entirely disappeared; their course was not now perceptible. The bruit was still heard in the tumour, most distinctly so on its left side, where an enlarged branch of the left occipital entered it, and seemed its chief supply. When this branch and the temporal of the same side were sufficiently pressed upon to stop the current of blood through them, the stethoscopic bruit was no longer heard. This induced me to treat them in the same way as the right, with needles and hare-lip sutures, which completely removed the bruit for the time.

At same time I removed the sutures and needles applied to the arteries of the right side on the 24th. A jet of arterial blood followed the withdrawal of the occipital needle, which was easily stopped by pressure.

The tumour, which was now very flaccid, was emptied of blood, strapped down with adhesive plaster, and a compress containing sheet lead, and a bandage applied.

July 2.—Removed bandage, &c. Found left occipital still pervious, probably from the needle having passed through, instead of beneath, the vessel. Passed another needle beneath the artery higher up, where it was more superficial.

8th.—Removed sutures and needles applied on left side on the 30th ult., and that applied to the right occipital on the 2d instant; could feel no circulation in any of the arteries deligated.

The tumour was now much reduced in size, the whizzing noise, which had been so annoying to the patient, was gone; but though without activity, it was still higher and softer than the neighbouring scalp. In order to reduce it still farther, I kept setons in it till the 24th August, and from that date to the 27th September, when the patient left for home, I had it constantly compressed by adhesive plaster, sheet lead, and a bandage. On his leaving I could perceive no bruit in the remains of the tumour, and it was daily decreasing in size, and increasing in firmness. I had, therefore, every reason to expect a radical cure, and had this not been the case, its remains might, at this time, have been excised without much risk of incontrollable hæmorrhage. But to this proceeding, even if it had been deemed necessary, there was, at least, one substantial objection; I mean the state of the bone. To have cut down upon and exposed a bone in the state in which I conceive it was in this case, would be a step which, I presume, no prudent surgeon would willingly have undertaken. Besides this, some of the gentlemen who saw the case were of opinion that the disease had originated in the bone itself: to this point I will again revert.

I may observe, that during the period of the above treatment, the patient's general good health was very little affected; he was not confined to the house for a single day. On the 4th of November last he wrote me that he felt neither pain nor pulsation in the remains of the swelling, which was then about as low as the rest of the scalp, and pretty firm, though not so firm as the rest of the head.

The following published cases of a similar disease, six in number, will illustrate the various plans of treatment adopted for its cure. The first is recorded by Pelletan, in the second volume of his *Clinique Chirurgicale*.

CASE I.—"Catherine Micat, aged 18; entered the Hotel Dieu in September, 1805, on account of a tumour which occupied the whole of the temporal region, and appeared to be composed of arteries enormously dilated. The ear was red, large and agitated throughout by pulsations synchronous with those of the heart. At the top of the helix was a cicatrix which gave way at the slightest touch, and the crevice resulting from its rupture, furnished a brisk and obstinate hæmorrhage; and this was renewed at every attempt to change the dressings. Pressure applied over the temporal artery arrested the movement and pulsation in the anterior part of the tumour. Permanent compression over this vessel was therefore commenced as a means of cure, but it was found to be too painful to be continued. M. Pelletan next undertook to secure the temporal and occipital arteries: but in the operation the temporal artery was transfixed, and only partially taken up; and in passing the needle under the occipital artery, blood gushed out from both extremities of the puncture; but after dividing the integuments over it this was secured, and pulsation ceased in the tumour. Compression was again employed, but it produced a slough, in consequence of which it became necessary to dress the part oftener than usual; at each dressing the hæmorrhage recurred, and the pulsation though less strong than usual, was renewed. In the course of treatment constitutional symptoms ensued, corysela appeared on the face, an abscess formed in the centre of the tumour, and another over the sternum; the occipital artery bled frequently; and finally at the end of two weeks from the operation, the patient died."—*American Journal of Medical Science*, May, 1839.

CASE II.—This case occurred in the practice of Mr. Wardrop, and is thus described in the *Lancet*.

"—, æt. 29, of a full and powerful habit of body. On the left side of his head, covering a portion of the frontal, parietal, and temporal bones, is a very large pulsating tumour, whose surface is extremely soft and very irregular, forming many lobules of various sizes and position, and resembling in appearance, those large varicose tumours which are occasionally found in the course of the saphena vein of the thigh. The pulsation is distinct throughout every part of the tumour, which can easily be emptied of its contents by pressure. The trunk of the temporal artery, and its anterior and posterior branches, are uncommonly enlarged, and pulsate with remarkable vigour. The two latter terminate suddenly in the swelling, which occupies the usual position of the middle temporal artery. The posterior aurial artery and the occipital, as well as a branch from the temporal vessels of the opposite side, are wonderfully enlarged, and they communicate abruptly with the disease. All these arteries have attained such a size that their situation is evident to the eye. On emptying the tumour of its contents, the cranium below is found to have undergone a remarkable process of absorption, particularly at those points where the tumour has attained the greatest bulk. It must at many places, have become exceedingly thin. The integuments covering the most prominent portion of the swelling, have become very much attenuated, and it is evident that ulceration of them must soon be the consequence of the distention. Over the trunk of the temporal artery is a long cicatrix, the result of an operation which was performed for the ligation of that vessel. The patient complains of frequent most distressing pains in his head, in other respects, he enjoys excellent health. The complaint commenced twelve years ago, after