PENETRATING WOUND OF THE NECK,

ACCOMPANIED BY

PROFUSE ARTERIAL HÆMORRHAGE ;

TREATED SUCCESSFULLY BY LIGATURE OF THE COMMON
CAROTID ARTERY.

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BENJAMIN WOOD, a policeman, aged 29, tall, thin, of intemperate habits and bad constitution, was brought to St. Thomas's Hospital, on October 14th, at a quarter before two o'clock. A quarter of an hour previously he had quarrelled with his wife, whilst they were sitting together at dinner, and she hurled a knife at him, which entered his neck on the left side, just below the angle of the jaw and in front of the sternomastoid muscle, making a clean wound about an inch in length. The knife with which the injury was inflicted was such as is commonly used at table, but worn away at the extremity of the blade, so as to present a rather sharp point and a cutting edge on both sides. He afterwards stated that he stanch'd the blood as well as he was able, whilst he ran down stairs to a surgeon close at hand, who applied a compress to the wound and immediately brought him over to the hospital.

When he was admitted, his clothes were saturated with blood, and he was still bleeding profusely. Mr. Solly, who was on the spot, directed that the common carotid should be compressed, and then enlarged the wound in different directions, in the hope of finding and securing the bleeding vessel or vessels,—as it seemed doubtful whether

the trunk of the external carotid alone was wounded, or whether its branches, and possibly the internal carotid, were not involved in the injury, for arterial blood flowed in profusion in spite of the pressure made on the common trunk. One ligature was applied at a point whence the blood seemed to issue, but without any effect. When I came to the surgery Mr. Solly had just succeeded in controlling the bleeding by pressing his fingers deeply into the wound, in the direction in which the knife seemed to have passed, namely, downwards and inwards.

The patient at this time was blanched and almost pulseless, and had vomited. After conferring with my colleague for a few moments, it was agreed that, as another gush of blood might prove fatal, I should place a ligature on the common carotid, whilst he retained his command of the bleeding vessels. An incision about two inches in length was made along the anterior border of the sterno-mastoid muscle, extending from the thyroid cartilage downwards; and when the superficial structures were divided, care having been taken to avoid injuring the external jugular vein and some branches of the cervical plexus, the sterno-mastoid and omo-hyoid muscles were held aside by an assistant with a retractor. The descendens lingualis was gently drawn to one side, and a small opening was made in the sheath of the vessels, which brought the artery into view. An aneurism needle was passed round the pulseless artery, and neither the par vagum nor internal jugular vein was seen. A large twisted silk ligature was used; but was not instantly tightened on account of a fit of vomiting which came on at the moment of passing the needle. Scarcely a tea-spoonful of blood was lost during the operation; and after the knot was made and the pressure entirely removed, not a drop escaped from the original wound. A single suture and two strips of adhesive plaster were employed to close the lower wound, and the upper one was plugged with a piece of sponge wrapped in gauze. The patient was then removed to bed.

Vespere.—Appears comfortable, and has slept half an

hour. Pulse feeble and rapid. Liq. Opii. sedat. ℥xx. si opus sit.

15th.—The anodyne was given, which procured a quiet night with refreshing sleep. I removed the compress and ligature which had been applied at the upper wound; and, as no bleeding followed, I brought its edges towards each other with strips of plaster. Pulse about 96, and improved in power. Complaints of difficulty in deglutition. Diet to be limited to arrow-root and milk.

16th.—Had a quiet night, without opiate. No head symptom nor loss of temperature or sensibility on the left side of the head: facial, temporal arteries, &c., on the left side, entirely pulseless. The difficulty of deglutition has increased, accompanied by accumulation of mucus in the air-tubes. The suture was removed from the lower wound; and he was permitted to have beef-tea in small quantities.

17th.—The anodyne was repeated last night. Uvula and palate much inflamed, and dysphagia very distressing: says he feels comfortable in other respects. Upper wound sloughy. Bowels relieved by enema. Pulse 92, even and of moderate power.

19th.—Improving; countenance better; he has some appetite, and can swallow with less effort and pain; but is obliged to relieve the sensation of suffocation by forcible expulsion of the mucus from the windpipe. Upper wound granulating, and producing a copious sanious discharge; lower wound has re-opened, but looks healthy. Pulse 96, quiet. Bowels relieved by injection. Takes the opiate at night.

21st.—He feels stronger; but his cough is troublesome. Wounds healthy; heart's action feeble, but pulsation in subclavian and carotid arteries strong.

24th.—Free discharge from both wounds; and there appears to be a sinuous communication between them: a compress to be applied in the intervening space. Takes one egg besides his beef-tea daily.

28th.—Not so well: has a hot skin, thirst, and rapid pulse; wounds a little foul, and granulations large and florid. The

latter were touched with sulphate of copper, and the wounds were lightly strapped and covered with water-dressing. Castor-oil and fever mixture ordered. The ligature being still firm, it was put on the stretch, and fixed down by a piece of adhesive plaster, so as to keep up a constant and gentle traction on it.

On the day following the above report, the ligature came away without the employment of any force, and the health of the patient subsequently improved. The purulent discharge continued rather abundant for some time; but the compress prevented its burrowing from one wound to the other. There was also a considerable quantity of limpid secretion from the upper wound, probably supplied by the parotid gland which must have been involved in the injury. His diet was gradually improved.

On the 4th of December he caught cold, and had a fresh collection of matter at the lower part of the neck; this subsequently escaped by the lower wound, which was not entirely healed. He is now (December 31st) quite well. When he left the hospital there was no return of pulsation in the branches of the external carotid.

The interest in the foregoing case is principally of a negative kind, consisting in the entire absence of any untoward symptom associated with, or arising from, the operation. It would seem, therefore, to confirm the opinion that, in similar penetrating wounds in this situation, followed by arterial hæmorrhage threatening life, it is better at once to place a ligature on the common carotid than to lose time in searching for the bleeding vessels. A satisfactory sequel in the present instance was less anticipated, as the patient had a constitution undermined by previous ill-health and irregular habits; moreover, before the separation of the ligature he suffered from severe catarrhal sore-throat, accompanied by bronchitis,—a serious complication, as it involved the necessity of frequently making a strong effort to expel the mucus which clogged the air-passages.

This case further presents an illustration of a remark

which occurs in Dr. Burrows' recent work on "Disorders of the Cerebral Circulation," that cerebral symptoms rarely supervene where there has been considerable loss of blood prior to the application of a ligature on the trunk of the common carotid artery. In the present instance the external carotid could not have been secured without an extension of the original wound; and even in the event of the internal carotid proving to be intact, the ligature must most probably have been applied close to the point of bifurcation of the common trunk.

A day or two after the operation I observed that the left angle of the mouth was perceptibly raised above the right, and that the lips came first in contact on the same side in closing the mouth. This peculiarity continued throughout the case, and it was not until a considerable time had elapsed that I was able to satisfy myself that the sound side was not partially paralysed: but, as the patient distinctly possessed more power in retracting the right than the left commissure of the mouth, I suspect that the phenomenon alluded to was partly attributable to natural expression, and partly the consequence of inflammation extending to the trunk of the left facial nerve, from its contiguity to the original wound.