CASE OF PHARYNGEAL ABSCESS

HÆMORRHAGE; LIGATURE OF CAROTID ARTERIES

BY

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THIS was a case of very severe hæmorrhage from an abscess in the roof of the pharynx above the right tonsil, which was eventually successfully arrested by the ligature of the common, external, and internal carotid arteries.

A man aged 28, a victualler by trade, was admitted into St. Thomas's Hospital, under Dr. Sharkey, on June 20th, 1896. He first felt pain in his limbs and sore throat on the 18th, two days before applying for admission.

His temperature on admission was 101° F. His symptoms rather suggested the onset of rheumatic fever as the cause of his illness, for, on examination, there was very little swelling to be seen in the throat. On June 21st, the day after admission, he bled rather profusely from the mouth, and it was thought, as there was a swelling above the right tonsil, that an abscess in this position was the source of the hæmorrhage. Moreover, the blood was seen to come from the right side.

He bled again on the 22nd, and on the 23rd Dr. Sharkey sent for me to see the case. His temperature was still high.

On examination I found that there was a swelling above and behind the right tonsil, but that the tonsil itself was not sufficiently large or vascular to be the seat of an abscess. There was no swelling externally in the neck, but some tenderness on pressure at the right angle of the jaw, and above this towards the base of the skull. The patient was a short-necked plethoric man, and judging from his appearance, addicted to a large consumption of beer. I made a digital examination of the posterior nares, and found a round smooth swelling above the right tonsil, filling up the space round the opening of the right Eustachian tube, and almost blocking the right posterior naris. In the middle of this swelling I thought I could feel a small opening. There was no bleeding at the time of my examination, but the same evening the hæmorrhage was repeated.

The next day, June 24th, he was taken to the operating theatre for a more complete examination. After the administration of an anæsthetic the soft palate was divided in the median line, and the two halves held apart by fine silk sutures. With the patient's head hanging over the edge of the table, a small round opening could be seen in the centre of the swelling, which was situated quite in the roof of the pharynx on the right side. The opening was between the margin of the right posterior naris and the Eustachian tube, but was too small to admit the tip of my finger. It was therefore enlarged backwards with a blunt-pointed bistoury. A finger was introduced into this wound, and a small abscess cavity found, extending deeply towards the neck, below the right Eustachian tube. Up to this point there had been no bleeding, but as the finger was withdrawn some oozing took place, which made me think that the hæmorrhage might have come from the jugular vein. The cavity was therefore plugged with cyanide gauze, and the patient sent

back to bed, with the palate widely open for any future emergency.

The same night he bled furiously, and when Mr. Abbott, the resident assistant surgeon, arrived, he found that two porringers, which are each capable of holding a pint, were full of bright red blood. Mr. Abbott quickly removed the plug, and introduced another more firmly. The man was extremely faint, but the hæmorrhage had been successfully arrested for the time.

On my visit next day, the 25th, I found the man so blanched and anæmic that I felt sure he would not stand another attack of hæmorrhage, and that it would not be wise to let him run the risk. I was also pretty confident, from the character of the last attack of hæmorrhage during the preceding night, that the bleeding was from the internal carotid artery.

The cavity which I had felt was too high for the suppuration to have involved the tonsillar branch of the facial artery, and was, I thought, too severe for the ascending pharyngeal. Still it was a possibility, but the operation I proposed to do would secure this artery as well as the internal carotid.

The man was therefore removed to the theatre, and the operation for ligature at the bifurcation of the common carotid undertaken, with the assistance of Mr. Abbott and Messrs. Crouch and Dyball, the two house surgeons.

Having exposed the carotid at its bifurcation the internal carotid was first ligatured, then the external, and finally the common carotid, all the ligatures being applied as close to the bifurcation as possible. Goldbeaters' skin was used for this purpose, a double ligature being passed in each case and tied as a stay-knot. The coats were not ruptured as far as one can tell, but the operation was necessarily a hurried one.

If the common carotid alone had been tied, the external carotid might have quickly brought blood round past the bifurcation to the internal carotid. This probability has

been well established by Mr. Pitts in 'St. Thomas's Hospital Reports,' vol. xii, p. 131.

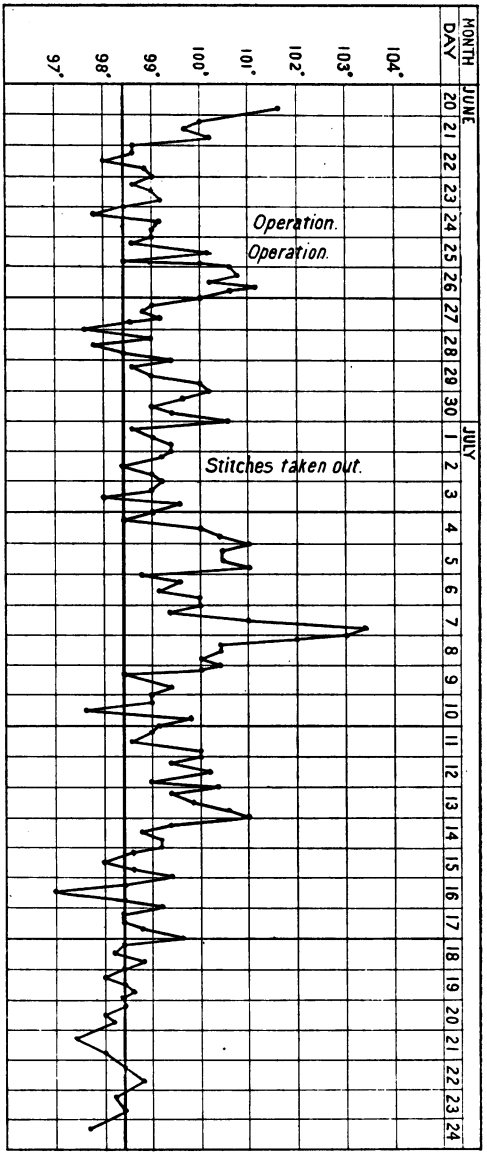
It was therefore necessary to tie one or other of these arteries as well as the common carotid; and to tie both of them, made the obliteration of the channel more secure. It was also necessary to tie the common carotid to ensure the closure of the ascending pharyngeal artery. I had therefore made up my mind to ligature all three arteries at the bifurcation if the operation became necessary.

The man ceased breathing at the commencement of the operation, but recovered quickly with artificial respiration. The whole operation had to be very rapidly performed, as the patient was in a most feeble condition. Two pints of a saline solution were thrown into the most prominent vein at the bend of the elbow by Mr. Abbott whilst I was suturing the wound, and applying a fresh plug to the abscess in the pharynx.

There is nothing to record in the after history of the case. The wound in the neck healed by first intention; the hole in the pharynx gradually closed, and the man had no further hæmorrhage. On July 16th examination with the finger proved that the pharynx had healed; the divided palate had also granulated up so far that it seemed probable an operation for its closure would be unnecessary. On July 23rd he was perfectly well, but still very anæmic, and was therefore sent on July 25th to a convalescent home.

When called upon to treat a serious case of hæmorhage from the pharynx it seems impossible to determine upon the exact vessel which is involved. It may be either the tonsillar branch of the facial, the ascending pharyngeal, or the internal carotid itself, which is the seat of the hæmorrhage.

Under these circumstances I would submit that it is the safest practice, if an operation has to be done to save life, to tie all three arteries at once, namely, the common carotid and its two branches, as it does not add to the



risks, but rather diminishes them, to cut off all the collateral supply by one operation, leaving only the anastomosis from the opposite side. If the bifurcation is exposed, the operation is not materially lengthened by the addition of the third ligature.

With regard to the tightness of the ligature and the rupture of the coats, it would seem best always to avoid this injury in large arteries if it be possible; and a permanent obliteration of the vessel is not so essential as it is in the treatment of an aneurism. For the same reason an animal ligature is quite sufficient for the purpose, for even if it were to melt away in five weeks' time, and the channel be restored, the abscess has had sufficient time to heal, and close the opening in the bleeding vessel.

(For report of the discussion on this paper, see 'Proceedings of the Royal Medical and Chirurgical Society,' Third Series, vol. ix, p. 144.)