

Account of an operation for the Extirpation of a Tumour, in which a ligature was applied to the Carotid Artery. By MASON F. COGSWELL, M.D.

[Communicated in a Letter to the Editors of the New-England Journal of Medicine and Surgery.]

GENTLEMEN,

AT the intercession of a number of my medical friends, I am induced to send you, for publication in your valuable Journal, the following cases; the one, although a pretty formidable operation, deserving to be recorded only as connected with its successor, and the other, deriving its claims from its having been the first time, in this country at least, where the carotid artery was tied and cut on the living subject. It may reasonably be questioned, why its publication should have been so long delayed? and to which, I confess, I cannot give a satisfactory answer. * * * * Still, however, even at this late period I was willing to be influenced by the solicitations of my friends, and perhaps by a sense of duty. I have a letter before me, which was written not long after the operation, to one of my pupils, in which all the important facts relating to it were detailed, and from which I shall endeavour to refresh my memory.

In the year 1800 Mrs L. of Lebanon, about 35 years of age, came to consult me respecting a tumour situated on the left side of her neck, occupying nearly the whole of the hollow between the outer angle of the jaw, and the superior part of the sternum, pressing on the trachea in a measure, that at times considerably impeded her respiration. She sometimes suffered from its inconvenient size, but never from pain. I advised an immediate extirpation; she consented, and I removed it without difficulty. Its character was that of a firm sarcoma, resembling a goose egg, in shape and smoothness, and weighing exactly a pound. No vessel was divided during the operation which required a ligature, the wound healed by the first intention, and she rode home on horse-back in about ten days from the operation. About two years after, she renewed her visit on account of another tumour, of a very different character from the former, on the same side of the neck, and originating in the parotid gland, about three inches from the base of the other. It commenced, she informed me, about six months previous, in a small lump when she first discovered it, not larger than a pea, that it had increased rapidly since, and at times gave her severe pain. It was now about the size of a hen's egg, had a very hard and unequal surface, and left no doubt of its being a genuine carcinus, and of a very malignant character from its commencement. I advised an

immediate removal, and stated to her the danger of delay. She said she was not prepared for the operation, promised to attend to it soon, and returned home. I heard no more from her until November 1803, when the fear of immediate death, her intolerable sufferings, and the universal desire which we all have to live a little longer, induced her once more to apply for relief. I visited her on the 4th of November 1803, when I met, in consultation, Drs Watsons, Clark, Peters and Strong. These gentlemen were from the neighbouring towns, with all of whom I had for a considerable time been well acquainted, and on whose judgment and professional skill I could confidently rely. Her situation was indeed a deplorable one. She was much emaciated, had hectic flushes, night sweats, cough and expectoration, accompanied with intolerable pains, almost constantly darting through the tumour, which threatened her at times from its pressure on the trachea with instant suffocation. Nothing but the softest liquids could be forced down with the utmost exertion; so much was she enfeebled from want of sustenance, that she could scarcely support her weight, and such encroachments had death made upon her countenance, that it seemed like rashness or folly to attempt her relief. Her mind however was unsubdued, and throughout the whole of the subsequent scene, she manifested the most unyielding fortitude. All the gentlemen concurring with me in opinion, I represented to her the extreme danger that would attend the operation, that she might possibly, and perhaps probably die in my hands; still, as she must inevitably die in a few days without it, if she desired it, I thought it my duty to undertake it. After a reasonable time for consideration, she determined to submit to the only alternative which presented for prolonging her life. Her sense of her own danger she manifested, most affectingly, in the solemn and impressive manner in which she commended her soul into the hands of him who gave it, as she approached the table on which the operation was performed. The tumour spread over the whole of the left side of her neck, extending from the ear to the junction of the clavicle with the sternum, sweeping over the trachea, rising above the edge of the under jaw, pressing on the mastoid muscle, and resting on the hollow bend of the clavicle. I commenced the operation by a crucial incision, and after separating the skin, for there was nothing but skin to separate, I had to proceed through every part of the operation with the utmost caution. If the external appearance was unequal, the internal was much more so, its processes extending themselves beneath almost every muscle and tendon in the neck; hence the extreme difficulty and danger attending the operation, and hence the tedious length of an hour to which it was extended. After dis-

secting around the tumour nearly to its base, I called the attention of the gentlemen to the situation of the carotid artery, and on a careful examination we found it completely enveloped by the tumour. I immediately laid it bare, encircled it with a broad, flat ligature, tied and divided it about half an inch from the knot. The remaining part of the operation was finished as speedily as was consistent with the safety of our patient, and with but little hemorrhage; and though extremely feeble, she was not faint. She bore the operation with surprising fortitude, almost without a struggle or a groan. The wound was immediately dressed; she was removed to her bed, and an anodyne administered; she likewise took some nourishing cordials, with great refreshment, as she had not been able to swallow, but with great difficulty, for some months previous. Dr Watsons and myself remained with her through the night; she slept quietly and without pain, having felt none after the smart of the operation was over; so widely different was her situation in the morning from what it had been for months before, that she felt, (to use her own expression)-like commencing a new existence. As I lived about thirty miles from her, I left her under the care of Dr Watsons. He removed the dressings on the fourth day from the operation, and found every thing as it should be. The wound healed kindly; her hectic symptoms vanished, the ligature cast off on the 14th day, and she recovered her health and strength so rapidly, that nothing now seemed to forbid a perfect recovery; and had her attendants been possessed of ordinary sagacity, the fatal event which succeeded might have been averted. On the 20th day from the operation, when every thing was doing well, a slight hemorrhage commenced from one of the anastomosing arteries, under the fore part of the jaw, which, in all probability, the slightest compression would have controlled. Dr Watsons resided three miles from her; and the messenger had to extend his ride six miles further before finding him; and although the hemorrhage was moderate, yet so much time had elapsed before the arrival of the Doctor, that the loss of blood was more than she could sustain in her feeble state. She had not a sufficiency left to support the powers of life, and she gradually declined and died a short time after, rejoicing that she had submitted to an operation which had relieved her from the most fearful agonies, and enabled her to enjoy rather than to suffer a peaceful death.

Thus in the event the case terminated fatally, yet the circumstances attending it were such, as entirely to establish the practicability and safety of dividing the carotid artery on the living subject.

It ought to be added, that in tracing the progress of the artery in the tumour, although it was fully open on the lower side, it was impervious to the smallest probe beyond its centre; indeed there was no trace of it to be found on the side next the jaw. How long the communication between the heart and the head, through this artery had been interrupted, could not be determined; some two or three months, however, is probable, as from about that time she felt a sensation of uneasiness, rather than pain, throughout the whole of the external covering of the left side of her head.

Hartford, Con. 1824.

Cases and Remarks. By a Contributor to the first series of this Journal.

[Continued from p. 129, Vol. XIII.]

DROPSY OF THE AMNION AND FŒTUS.

DROPSY is occasionally a disease of the fœtus, and may exist to a degree sufficiently great to interfere seriously with labour. Water collects in the abdomen, or in the cellular structure beneath the skin. This last case is rare. I have in my collection a fœtus in which anasarca existed in a very remarkable degree. The child when born, weighed fifteen pounds. It was almost a shapeless mass, exhibiting a species of monstrosity quite alarming to the patient and her friends. The extremities scarcely projected from their places, the whole length of the limbs being lost in the universal tumour. The mother had been frightened during pregnancy by a very large tortoise which had been brought from sea, and without her knowledge, placed near the house. It was said that the monstrosity had been produced by fright, and the mishapen mass was thought to give some foundation for the opinion. An accidental wound of the integuments was followed by a perfect escape of the water, and the limbs and features at once became evident. The preparation when thus diminished, did not weigh more than six pounds.

Partial anasarca is more common. It occasionally exists about the umbilicus, in the envelope of the cord at its root. In such instances, the cord itself may partake of the disease. The integuments of the scrotum, and labia are sometimes distended with water. This may be confounded with swelling which sometimes occurs in the same parts from pressure incident to some presentations. When water is effused, the skin is very smooth, tense, yielding to pressure, and very pale. Blood gives