

WOUND OF THE AXILLARY ARTERY.

[Communicated by Thomas Hubbard, M. D. Pomfret, Connecticut.]

January 27, 1815. **HARRY CARTER**, a black man, aged twenty-six, in the evening in a fracas, received a wound with a butcher's knife, in the posterior and upper part of the left arm. The hæmorrhage was very profuse; medical aid was applied for, but not obtained until the next morning.

28th. Dr. D. Hutchins, of Pomfret, visited the patient. The attendants stated to him, that the patient had lost two gallons of blood. However, by their dressings, assisted by compression, the hæmorrhage had now ceased.

Dr. Hutchins prescribed bark and opium. His feet were œdematous.

February 1. Dr. Hutchins found the arm very painful and excessively swollen. The patient had been unable to lie down since the hæmorrhage had been suppressed, and had spent the greater part of the time standing in a particular posture.

Subsultus tendinum had occurred. A mild cathartic was administered, opium directed.

2d. The pain and subsultus were less. An aneurismal tumour had formed round the wound. The cathartic was repeated, and the quantity of opium lessened.

3d. The aneurismal tumour increased, the arm above the wound excessively swollen; indeed the whole arm was extremely painful, and œdematous to the fingers. Dr. J. Palmer, Jr. of Ashford, attended in consultation. The whole arm was rolled in a bandage.

4th. This morning, coagula of blood burst out at the wound. A violent hæmorrhage ensued, which was suppressed by applying a cord around the scapula and under the axilla, and twisting it with a stick. At noon the tourniquet was removed, and the whole arm loosely dressed.

5th. I attended in consultation with the gentlemen before mentioned. I found the external wound about three inches be-

low the joint of the shoulder, in the back part of the arm. A large aneurismal tumour extended from the wound to the axilla. The whole arm and hand excessively swollen, œdematous, and cold. There was no pulsation in the radial artery at the wrist. The patient was extremely weak, and some hæmorrhage took place while we were examining the wound.

I proposed the ligature of the artery as the only resource, to which the other medical gentlemen readily assented.

The patient was laid upon a table, and the arm separated from the body at right angles. Strong compression was made upon the left subclavian artery, as it passes over the first rib, by an assistant who applied his thumb forcibly above the clavicle. As it was totally uncertain at what precise point the axillary artery was wounded, it was thought most proper to enlarge the original wound obliquely upward till we should be able to discover the wounded artery. I accordingly made an incision in the above direction, through the skin and cellular substance, extending it to the edge of the pectoralis muscle in the axilla. I then introduced the fore finger of my left hand into the original wound, and making use of it as a director for the scalpel. I quickly enlarged the wound in the aneurismal sac, in the same direction as the first incision was made, and turned out the coagula of blood. A jet of blood issued from the artery high in the axilla.

I then introduced my left fore finger under the artery and nerves, and with my thumb compressed the artery, and the hæmorrhage immediately ceased. The assistants then cleared the cavity more completely of extravasated blood. I discovered that it was necessary to enlarge the incision upwards and inwards, and to divide some of the fibres of the pectoralis muscle. I introduced the fore finger of my right hand under the edge of the muscle, and directed an assistant to pass a probe pointed bistoury upon my finger and divide some of the fibres of the muscle obliquely upwards. In making this incision, the cephalic vein was divided. A quantity of very dark blood issued out; but the discharge was soon stopped by compression with the finger of an assistant.

We then discovered the artery wounded high in the axilla, surrounded by the plexus of nerves, none of which were injured. It appeared that the point of the knife, by which the original

wound was inflicted, had penetrated obliquely upwards, and divided the artery partially, making a small flap.

With some difficulty, I succeeded in passing a common blunt, crooked needle, armed with a double ligature around the artery. One of the ligatures was tied above and the other below the wound in the artery, and very near the orifice. The artery was not divided between the ligatures.

The assistant who took charge of the compression of the subclavian artery removed the compression, and the artery was seen to pulsate against the upper ligature.

The edges of the wound were now brought as near together by the adhesive plasters, as the swollen state of the parts would admit; over the plasters, lint, compress, and a bandage were loosely applied. Some aloetic pills were directed.

6th. A pupil of mine saw the patient this day. The patient had passed a quiet night, his arm had been much less painful since the operation. The aloetic pills had produced a discharge from the intestines. His feet, face, and affected arm were œdematous. The arm, which had been very cold for a few hours after the operation, had now become preternaturally warm.

7th. I removed the dressings; the tumefaction of the arm had greatly subsided, as well as the œdema of the feet, &c. The arm was of a natural temperature. The discharge was large and scrous, of a greenish colour and intolerably foetid. We imagined that there was a small pulsation of the radial artery at the wrist. Appetite good; aloetic pills repeated.

I again dressed the wound; the tumefaction of the arm had still further abated; suppuration abundant, though the discharge was less thin and foetid; dressed as at first. Bark was directed. The patient was left in the care of the two gentlemen who first attended him.

19th. A student of mine saw the patient, and found that he had been constantly mending, since my last visit. The patient complains of a slight numbness in the arm at times. The attending physicians have thought that they had occasionally felt a pulsation of the radial artery at the wrist. An evident pulsation was, however, to be perceived near the elbow, where the anastomosing and the recurrent branches unite.

The attending physicians report that he afterwards gained rapidly; the wound healed fast and he was recovering the use of his arm, when he absconded to parts unknown.