

Correspondence.

"Audi alteram partem."

NON-FATAL RUPTURE OF ANEURYSM OF THE DESCENDING AORTA.

To the Editor of THE LANCET.

SIR,—In your issue of Oct. 9th an interesting case of aortic aneurysm is recorded by Dr. S. R. Tattersall, in which the patient lived for about four months after a profuse hæmoptysis, evidently due to leakage of the aneurysm into the lung. As regards duration of life after a large aortic hæmorrhage this case resembles the well-known case of Liston, the great surgeon, who lived for five months after a profuse hæmoptysis from an aortic aneurysm. As a rule, hæmoptysis in these cases is followed either immediately, or within a few hours or days, by a fatal gush.

In a woman, however, who was under my care at the Sheffield Royal Hospital in December, 1911, with a palpable aneurysm of the transverse arch, slight hæmoptysis had begun two or three months earlier and lasted off and on for a few weeks. She remained under observation as an out-patient, and had no further hæmoptysis until April, 1913; it then continued in slight amounts almost daily, until on May 7th she brought up about a pint. She was readmitted to hospital, and for the next month slight daily hæmoptysis continued. She died suddenly from a fatal gush on June 6th, 1913. Autopsy showed the aneurysm ruptured into a bronchiole, and no other cause for the bleeding. In this case there had been oozing for over one and a half years.

It may be said that in such a case the early hæmoptysis did not come from the aneurysm itself, but from some small vessel in the lung, and was really a hæmoptysis of high blood pressure, sometimes described as "gouty hæmoptysis." That is quite possible where the bleeding is only slight, but the following case, which I saw in consultation with Dr. T. Robertson in July, 1916, cannot be explained in such a way, and shows that even a leak of considerable extent may be closed up, and that, not once only, but several times.

The patient was a man, aged 46, formerly a sailor. His thoracic symptoms began two and a half years before I saw him. He gave a positive Wassermann. X rays showed a pulsating shadow in the third part of the aortic arch. He had been treated by salvarsan, rest in bed, and iodides. He improved and was able to go about until August, 1915, when the first hæmoptysis occurred, described as a "bowlful of blood." From then onwards at intervals of a few weeks he had recurrences, varying in quantities from half a pint to very large, almost fatal, hæmorrhage. After these he was extremely collapsed and bloodless for long periods. I saw him after one of these; he was blanched, with a small frequent pulse and in great terror of a recurrence. He died eventually a few months later as the result of a hæmorrhage.

In this case there can be no doubt that the aneurysm itself had been leaking into the lung at intervals for well over a year. Such a case must be almost unique. Aneurysmal leaks of even greater duration have been recorded. Gairdner¹ records such a case in a man, aged 40, who had an almost fatal gush nearly five years before his death from hæmoptysis. During the intervening years the physical signs of aneurysm were quite definite, but the hæmoptysis was never more than streaky. In this case there was, as in that of Liston and in Tattersall's, one large non-fatal hæmorrhage—and one only. In Dr. Robertson's case which I have recorded above the extraordinary feature is the repeated recurrence of large non-fatal hæmorrhage.

I am, Sir, yours faithfully,

Sheffield, Oct. 10th, 1920.

ARTHUR J. HALL.

THE SITE FOR INTRAMUSCULAR INJECTIONS.

To the Editor of THE LANCET.

SIR,—The method of medication by intramuscular injection is now so common that the best site is a matter of importance. The gluteal region appears to enjoy a traditional reputation for this purpose, but

surely with less justification than as the time-honoured seat for castigation! The area is very vascular, is abundantly bestowed with important nerves, and is subject to the constant physiological traumatism involved in sitting and lying, to say nothing of the activity associated with walking. The deltoid region, which is its next competitor in popularity, has similar disadvantages. Doubtless with a proper selection of the exact situation and depth of the puncture, and a little care, accidents ought not to occur; but in addition to the disadvantages mentioned, neither areas are fool-proof. Discomfort and soreness with sometimes sepsis cannot always be avoided into whatever muscles injections are made; but deep in the buttock the consequences may be very serious, and I know of a case in which death resulted from sloughing. Further, there is the risk of injury to nerves, and to my knowledge both great sciatics have received an injection of quinine with unfortunate result.

I would like to suggest that the region of the outer side of the thigh, where lies the great vastus externus muscle, is as nearly as possible the ideal place for all types of intramuscular injection. Here we have a large mass of muscle protected by the strong fascia lata and embedded in so much cellular tissue as to allow ample room for distension. The area does not contain any important nerves or large blood-vessels, and it can be as readily freed from physiological traumatism as any other part. The needle should be introduced about the middle of the outer side of the thigh viewed both from back to front and above down. If the bone is reached the needle is to be slightly withdrawn before the injection is made.

I have repeatedly used this route for all sorts of injections, including saline up to a pint (quite apart from the wisdom or otherwise of exhibiting normal saline in this way), quinine hydrochloride in varying doses, the several varieties of sera and cuprase. I have never seen any evil consequences, and certainly much less of inconvenience than in the other and more usual sites, and it has the further advantage that it can be used repeatedly, the situation of the puncture simply being varied a little each time.

I believe that if these considerations were taken into account this route would become the recognised one, and with good reason. I should have hesitated to bring this matter before your readers had it not been that the old favourites are still recommended in recent papers, and that conversation with my friends has led me to believe that the vastus externus is commonly neglected for this purpose.—I am, Sir, yours faithfully,

G. GREY TURNER.

Newcastle-upon-Tyne, Oct. 11th, 1920.

LIGATURE OF THE INNOMINATE.

To the Editor of THE LANCET.

SIR,—The death of Lieutenant-Colonel John Lewtas (late I.M.S. Bengal), recorded in your issue of Oct. 9th, calls to mind the interesting fact that he was one of the first surgeons to ligature successfully the innominate artery. Two such cases preceded. One the well-known case of Smyth, of New Orleans, in 1864, where secondary hæmorrhage was stopped by pouring small shot into the wound; the other that of W. M. Banks, of Liverpool, in 1883, where pulsation recurred and death from pneumonia followed a secondary operation 67 days later. Lewtas's was the third successful case, and is recorded in the *British Medical Journal*, 1889, vol. ii., p. 312.

The patient, a soldier, aged 20 years, was in the Murdan Hospital, Punjab, India. A month before operation his gun burst and he thought that a piece of the breech lodged above the right collar-bone. There was bleeding from the wound for three days before admission. There was a hard non-pulsating swelling above the clavicle with brownish blood oozing from a partly healed wound in its centre. Operation on May 13th, 1889. This wound was enlarged and a fragment of steel removed. Profuse hæmorrhage followed which was stopped by pressure. An incision was made along the inner edge of the sterno-mastoid and the innominate and carotid tied with catgut. The patient recovered.

I am, Sir, yours faithfully,

Wimpole-street, W., Oct. 11th, 1920.

A. W. SHEEN.

¹ Clinical Medicine, Edinburgh, 1862, p. 513.