CASE
OF
PRETERNATURAL GROWTH
IN THE
LINING MEMBRANE

COVERING THE TRUNKS OF THE VESSELS, PROCEEDING
FROM THE ARCH OF THE AORTA.

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A MAN of 56, of a robust and healthful appearance, and of temperate habits, dropped down suddenly, when working in his garden in my neighbourhood, in the month of June, 1822. His fall was seen by some of his neighbours, who instantly went to his assistance, and found him motionless, in a state of complete insensibility, and without respiration. Not the smallest signs of life were afterwards exhibited.

He was represented by his widow and friends to have previously enjoyed very good health, and never to have made the smallest complaint of pain, or derangement of function. There was no tur-

gescence nor lividity of countenance at the time of his fall, nor half an hour afterwards, when I saw him.

On the day after his death, the body was examined by Mr. Cross, of Norwich, and myself, and the following appearances were noticed.

A small portion of fluid was found between the pia mater and arachnoid coat of the brain; a slight ossification was observed in the internal carotids; and the vertebrae were of more than their ordinary size.

The heart was rather larger than usual, and with both sides remarkably tense and turgid, but particularly the left, which was exceedingly hard and resisting. During the operation of taking out the heart and large vessels, for facility of examination, the firmness of the left side was a little diminished, as if from a portion of the contained blood having escaped by the aortic opening.

The parietes of both ventricles were firm and thick, more especially those of the left. All the cavities were filled with blood, in a considerable degree coagulated. The coronary vessels, and the valves, were all of them healthy. The whole of the ascending aorta was somewhat increased in diameter, and its inner surface, in many places, covered with firm irregular scales of ossification.

The vessels which were transmitted from the arch of the aorta, exhibited remarkable and interesting appearances.

The trunk of the arteria innominata, and the trunks of the left carotid, and of the left subclavian arteries, were all of them in a considerable degree plugged up with a growth from the lining membrane of the artery, having the same general nature and appearance as the lining itself, and without any ossific deposition.

In the arteria innominata, this preternatural growth extended, irregularly, about an inch up the vessel, the calibre of which was reduced by it, to less than one-third of its usual dimension. In the left carotid, it was confined nearly to the opening of the trunk into the aorta; but the orifice was diminished to such an extent, as to admit not more than the passage of a common-sized probe.

In the left subclavian, it extended about half an inch up the vessel, the cavity of which it had diminished to the extent of a small slit. No other morbid appearances were observed.

It was a matter of much surprise to me, that with alterations of structure so considerable as those which I have described, no symptoms of previous indisposition should have manifested themselves. More particular inquiry, however, convinced me,

that this account was not altogether accurate; for though it was quite true, that the poor man's general health had always been good, yet he had experienced, within the last two years, two or three attacks of sudden faintness, from which however he soon recovered. The state of his pulse was not known.

The interruption to the passage of the blood in the vessels supplying the head and upper extremities, would necessarily require a greater effort on the part of the heart, to effect circulation through them; which would produce an augmentation of its parietes, and an increase of its muscular power: but what were the immediate circumstances which occasioned syncope and death, by giving rise (as I imagine took place in this case) to an interruption to the passage of blood to the sensorium, and therefore a suspension of the supply of nervous influence to the heart, it is not easy to determine.

I have not met with any record of a case similar to this; but the elevation into protuberances, of the inner membrane of arteries, in other situations, is mentioned by pathologists*.

A sketch of a portion of the arch of the aorta,

* Vide *Morgagni* de Sedibus et Causis Morborum, Epist. xviii., Art. 8; xxvi. 17; xxvii. 28; lxxiv. 5; and *Baillie's* Series of Engravings to illustrate the Morbid Anatomy, Plate 14, fig. 3.

containing the arteries proceeding from it, accompanies this communication, and is engraved in

PLATE XI. FIG. 1.

EXTERNAL VIEW.

- a.* The arteria innominata, having a small opening at its upper part.
- b.* The left carotid, with a portion of wood thrust through the opening into it.
- c.* The left subclavian, having an opening like a slit on the left side, and a small hole extending a short way into the protuberance of the inner membrane, a little above it.

FIG. 2.

INTERNAL VIEW.

- d.* The opening into the arteria innominata from the aorta.
- e.* The opening into the left carotid, thrown a great deal to one side.
- f.* The opening into the left subclavian.

Patches of ossific matter are deposited irregularly over the inner surface of the aorta, around, but not immediately at, the openings of these arteries.

Fig. 1.

Fig. 2.

Drawn by S.Y.

Engraved by I. Stewart.