

which only admitted a small probe. In spite of this there was never difficulty in swallowing fluids.

The association of paralysis of the left vocal cord with a small pulse in the left radial artery is a combination which, apart from aneurism, must be somewhat rare. The growth of the tumor around the artery, compressing and narrowing its lumen, was very obvious at the autopsy, and satisfactorily explains the character of the pulse. Paralysis of the left recurrent laryngeal nerve is of frequent occurrence in cancer of the oesophagus, and occasionally both nerves are attacked, so that by itself this sign would not mislead the clinician. It is, however, quite conceivable that the combination of two such well known signs of aneurism might prove deceptive.

Death from haemorrhage is an unusual termination in oesophageal cancer. In our case the artery was adherent to the lung, and in close contact with the gangrenous area, and perforation occurred from extension of the necrotic process. The haemorrhage thus took place into the gangrenous cavity, and thence passed by the bronchi to the mouth. Taylor* has collected nine cases of fatal haemorrhage from the aorta, resulting from carcinoma of the oesophagus. In most of them death resulted from sudden and profuse vomiting of blood, and in nearly all cases blood was found in the stomach. In his own case there was a hole the size of a pea in the aorta; through this a portion of the malignant growth from the oesophagus had extended, presenting a shreddy filament free in the aorta. There was an ulcer opposite the hole in the aorta, probably produced by friction with the filament of cancerous tissue. There was no external haemorrhage, all the blood having found its way to the stomach.

In our case the haemorrhage was from the artery into the gangrenous cavity, so that none reached the stomach. The small peri-appendicular abscess was not suspected during life, and the rigors which occurred were attributed to an ulcerative process about the tumor. That this origin was probable is indicated by the facts that the rigors only occurred late in the disease, and were accompanied by cough, and later by fetor of the breath, and sputa.

* Guy's Hospital Reports, XLIX., 1882