are of the non-striated variety. The action of the oesophagus is reflex and involuntary, the sensory nerves being sensory branches of the glossopharyngeal, the pharyngeal and the vagus, and the motor being motor branches of the vagus. The centre is in the medulla. If the oesophagus be divided, stimulation of the pharynx will cause peristalsis in the lower portion, whereas stimulation of the lower portion would not do so. When both vagi are divided there is spasm of the oesophagus, due to the uncontrolled action of the sympathetic ganglia in its walls.

Obstruction may be caused in three ways, within the luman, pressure from without, from changes in the wall. In the first class might be mentioned masses of food, foreign bodies, tumors, polypi, parasitic growths, diphtheritic membrane. In the second class there would be abscess of the neck or mediastinum, aneurism, enlarged glands, pouches of the pharynx or oesophagus, tumors in the mediastinum, exostoses of the vertebrae or sternum. In the third group would be spasmodic, cicatricial and malignant stricture, and dysphagia from dilatation or paralysis. There are instances in which several of the above factors may enter into the obstruction.

Among the symptoms of obstruction of the oesophagus one of the first and most important is dysphagia. This may come on gradually, or be sudden in its onset, or intermittent. Pain is not always present. It is often referred to the upper end of the sternum or episternal notch, though the obstruction may be at the lower end of the passage. Cough and dyspnoea are common, especially if a foreign body be in the oesophagus. When suffocation is threatened the foreign body is likely in the pharynx and pressing upon the larynx. When there is stenosis of the tube there is usually regurgitation of food, unaltered by the process of digestion. There may be the eructation of retained and decomposed material. When the obstruction has lasted for some time there is emaciation. It must be borne in mind that symptoms may be absent for some time, or may continue after the cause has been removed. Then, again, the symptoms may be intermittent. Auscultation from behind may detect some change in the deglutition wave. If regurgitated matter is alkline it has not reached the stomach. The fluoroscope, x-rays and the sound may aid in clearing up the nature of the case. Great care must always be taken in using the sound.

Stricture is a common cause of obstruction. It is seldom congenital. Spasmodic stricture is met with in neurotic subjects. Drunkards are sometimes attacked with a form of dysphagia. Organic stricture may be caused by injury, caustics, cancer, syphilis, or tuberculosis. When dysphagia comes on after forty without history of injury or ulceration, it is almost certain to be malignant. There may be dilatation of the gullet from weakness in its walls.