

anterior portion of the œsophagus. This branch evidently represents the “arteria œsophagea descendens” of Barkow.

(b) *The Palatine Artery* arises from the external carotid above the origin of the lingual artery, and passes forwards to gain the roof of the mouth. Here it lies between the pterygoid muscle and the papillated mucous membrane of the palate, and after extending forwards parallel to the palatal fissure, terminates close to the anterior extremity of the bony palate, by inosculating with its fellow of the opposite side. A number of small branches are supplied by the palatine artery to the anterior portion of the œsophagus, as well as to the soft parts in the neighbourhood of the palate.

As the palatine artery passes forwards it gives off a branch of considerable size, which winds upwards round the inner border of the pterygoid muscle, to gain the upper or orbital surface of that structure, where it develops a coarse arterial *rete*, which occupies the floor of the orbit. This *rete*, moreover, receives a communicating branch from the trunk of the internal carotid artery after that vessel has passed into the interior of the skull. From the plexus of blood-vessels so formed, numerous branches are given off. A few of these branches supply the pterygoid muscle, but much the greater number pass forwards, and terminate by supplying the structures occupying the anterior inferior angle of the orbit, and the basal region of the superior maxillary bone.

(c) *The Anastomotic Artery*.—The artery which I have thus named comes off from the external carotid artery, and passes obliquely backwards and outwards to gain the deeper surface of the panniculus carnosus muscle. Here it gives off numerous branches to the superior and lateral surfaces of the neck, and terminates by inosculating with the subcutaneous cervical artery. It thereby completes an important anastomosis between the commencement of the common and that of the external carotid arteries. This artery, like the subcutaneous cervical, lies alongside of the vagus nerve and jugular vein.

In *Pygosceles tæniatus* the anastomotic artery is given off from the internal carotid,  $\frac{1}{4}$ th of an inch from the origin of the latter.

### (B) *The Internal Carotid Artery.*

After separating from the external carotid, the internal carotid artery passes inwards to reach the base of the skull, where it traverses the carotid canal, and thereby reaches the interior of the cranium. Here it divides into two terminal branches, an anterior and a posterior. The anterior extends alongside of the sella turcica, and divides into two branches, of which one passes vertically upwards to supply the cerebral hemisphere, while the other (the ethmoidal) leaves the front of the cranial cavity by means of a special foramen, and reaching the orbit, terminates by breaking up into branches for the supply of the straight muscles of the eyeball. The posterior terminal branch of the internal carotid passes backwards and supplies the cerebellum.

From the internal carotid artery, in addition to the terminal branches just described,