

in these ganglia, pass through gray rami communicantes to all the spinal nerves, and are distributed with their cutaneous branches, ultimately leaving these branches to join the small arteries. The postganglionic fibers do not necessarily return to the same spinal nerves which contain the corresponding preganglionic fibers. The vasoconstrictor fibers to the head come from the upper thoracic nerves, the preganglionic fibers end in the superior cervical ganglion. The postganglionic fibers pass through the internal carotid nerve and branch from it to join the sensory branches of the various cranial nerves, especially the trigeminal nerve; other fibers to the deep structures and the salivary glands probably accompany the arteries.

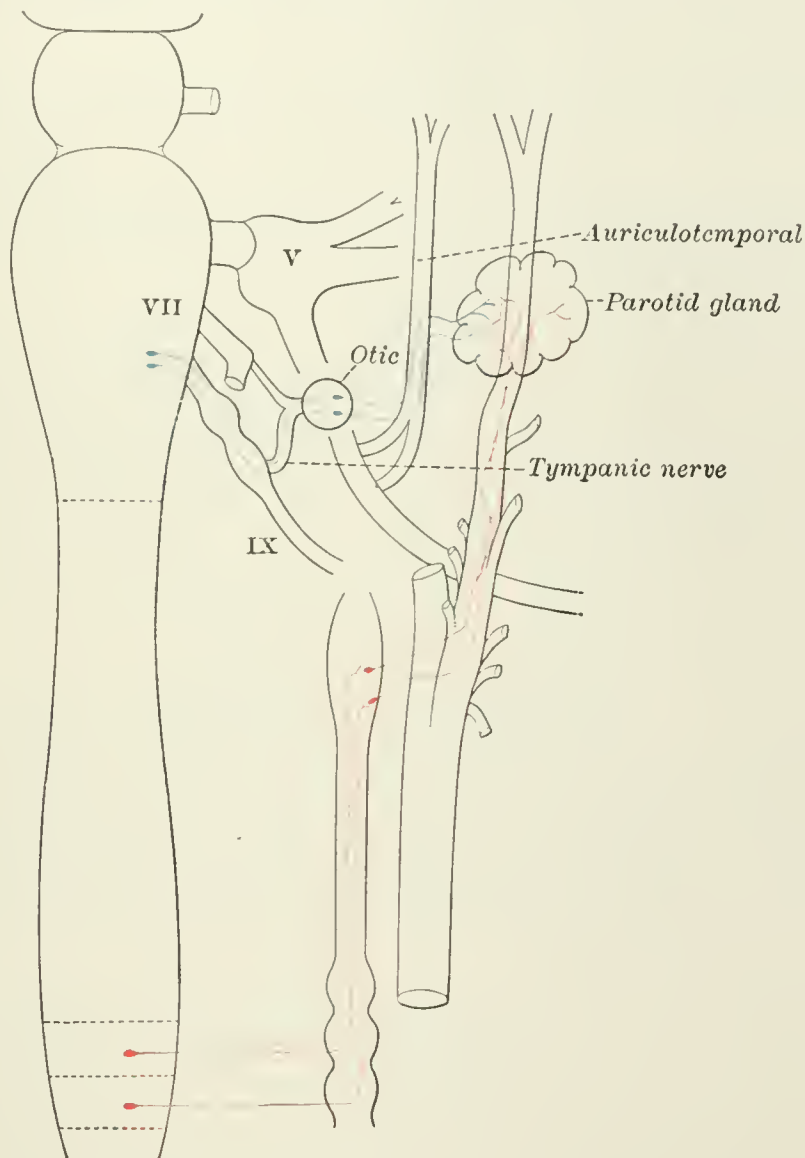


FIG. 843.—Sympathetic connections of the otic and superior cervical ganglia.

The postganglionic vasoconstrictor fibers to the bloodvessels of the abdominal viscera arise in the prevertebral or collateral ganglia in which terminate many preganglionic fibers. Vasoconstrictor fibers to the pelvic viscera arise from the inferior mesenteric ganglia.

The pilomotor fibers to the hairs and the motor fibers to the sweat glands apparently have a distribution similar to that of the vasoconstrictors of the skin.

A vasoconstrictor center has been located by the physiologists in the neighborhood of the facial nucleus. Axons from its cells are supposed to descend in the spinal cord to terminate about cell bodies of the preganglionic fibers located in the dorso-lateral portion of the anterior column of the thoracic and upper lumbar region.

The motor supply to the dilator pupillæ muscle of the eye comes from pregan-