

**LEVEL: MIDBRAIN—
SUPERIOR COLLICULUS**

In this section the tectum and tegmentum are of the midbrain and the basilar portion consists of pons and midbrain.

Tectum. The superior colliculus forms the tectum and consists of four layers; the tectospinal tract originates from the deepest layers. The superior colliculus is important

in integrating eye movements to brain stem activity.

Tegmentum. The superior cerebellar peduncle is still crossing. The central tegmental tract (reticulothalamic) is conspicuous in the reticular formation. The medial longitudinal fasciculus (MLF) is seen with some fibers crossing the midline. On the right side, fibers of the auditory system, the brachium of the inferior colliculus, are seen entering

the medial geniculate nucleus of the thalamus. Most of these fibers originated in the inferior colliculus. The medial lemniscus is the conspicuous tract extending from the midline up to the lateral surface of the midbrain. A portion of the substantia nigra is seen on the left side between the medial lemniscus and cerebral peduncle. The lower half of the periaqueductal gray and other tegmental nuclei form the limbic-midbrain

region important in our level of attentiveness.
Basis. Laterally the cerebral peduncles are present and fibers from the frontal cortex are seen entering the pons.
Cranial Nerves. Nerve III indents the medial longitudinal fasciculus (MLF) in the ventricular floor. A few cell bodies of the mesencephalic nucleus of nerve V are still seen in the lateral margin of the periaqueductal gray.

