

1. Medial superior pontine syndrome (paramedian branches of upper basilar artery)

On side of lesion

Cerebellar ataxia (probably): *Superior and/or middle cerebellar peduncle*

Internuclear ophthalmoplegia: *Medial longitudinal fasciculus*

Myoclonic syndrome, palate, pharynx, vocal cords, respiratory apparatus, face, oculomotor apparatus, etc.: *Localization uncertain—central tegmental bundle, dentate projection, inferior olivary nucleus*

On side opposite lesion

Paralysis of face, arm, and leg: *Corticobulbar and corticospinal tract*

Rarely touch, vibration, and position are affected: *Medial lemniscus*

2. Lateral superior pontine syndrome (syndrome of superior cerebellar artery)

On side of lesion

Ataxia of limbs and gait, falling to side of lesion: *Middle and superior cerebellar peduncles, superior surface of cerebellum, dentate nucleus*

Dizziness, nausea, vomiting; horizontal nystagmus: *Vestibular nucleus*

Paresis of conjugate gaze (ipsilateral): *Pontine contralateral gaze*

Skew deviation: *Uncertain*

Miosis, ptosis, decreased sweating over face (Horner's syndrome): *Descending sympathetic fibers*

Tremor: Localization unclear—*Dentate nucleus, superior cerebellar peduncle*

On side opposite lesion

Impaired pain and thermal sense on face, limbs, and trunk: *Spinothalamic tract*

Impaired touch, vibration, and position sense, more in leg than arm (there is a tendency to incongruity of pain and touch deficits): *Medial lemniscus (lateral portion)*