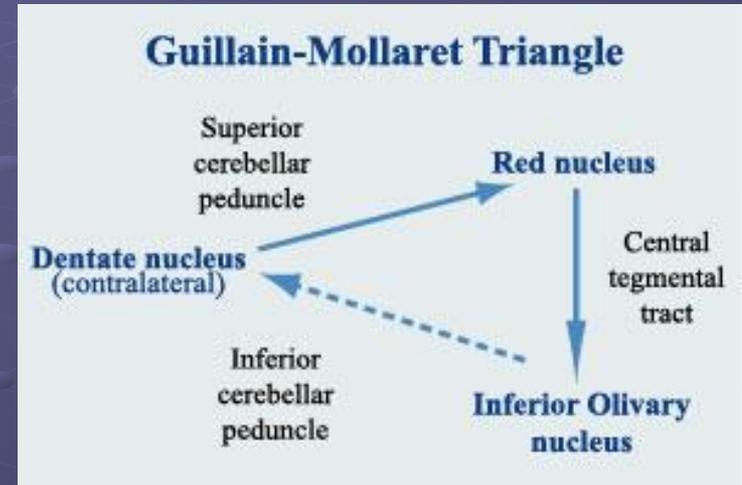


Hypertrophic Olivary Degeneration

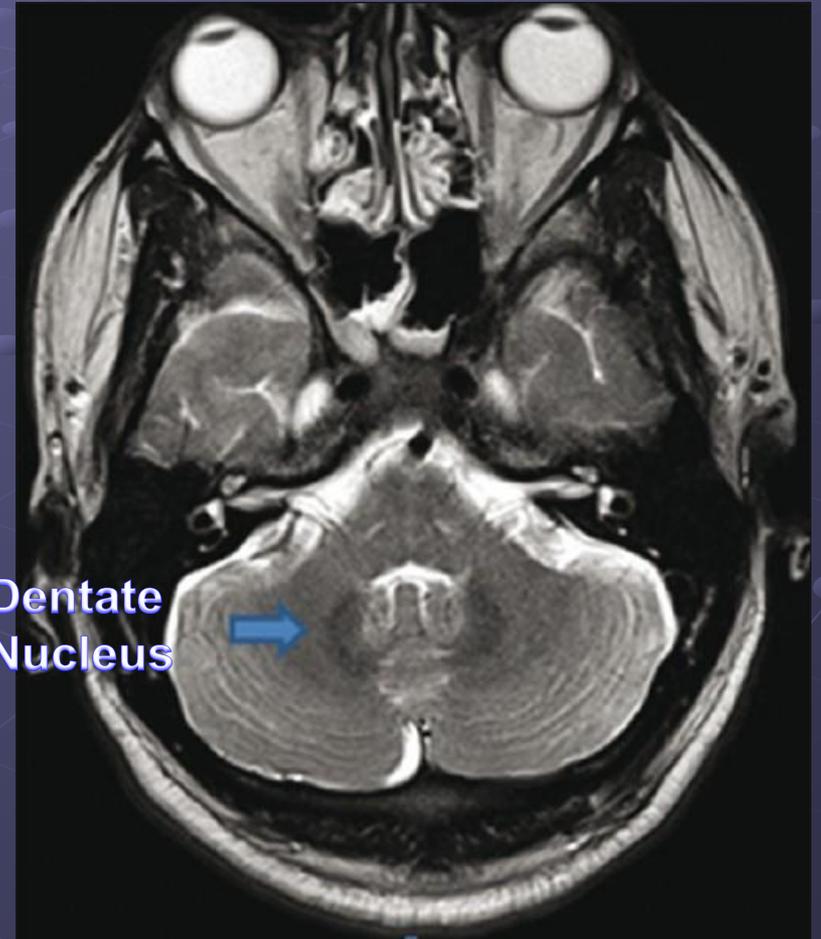
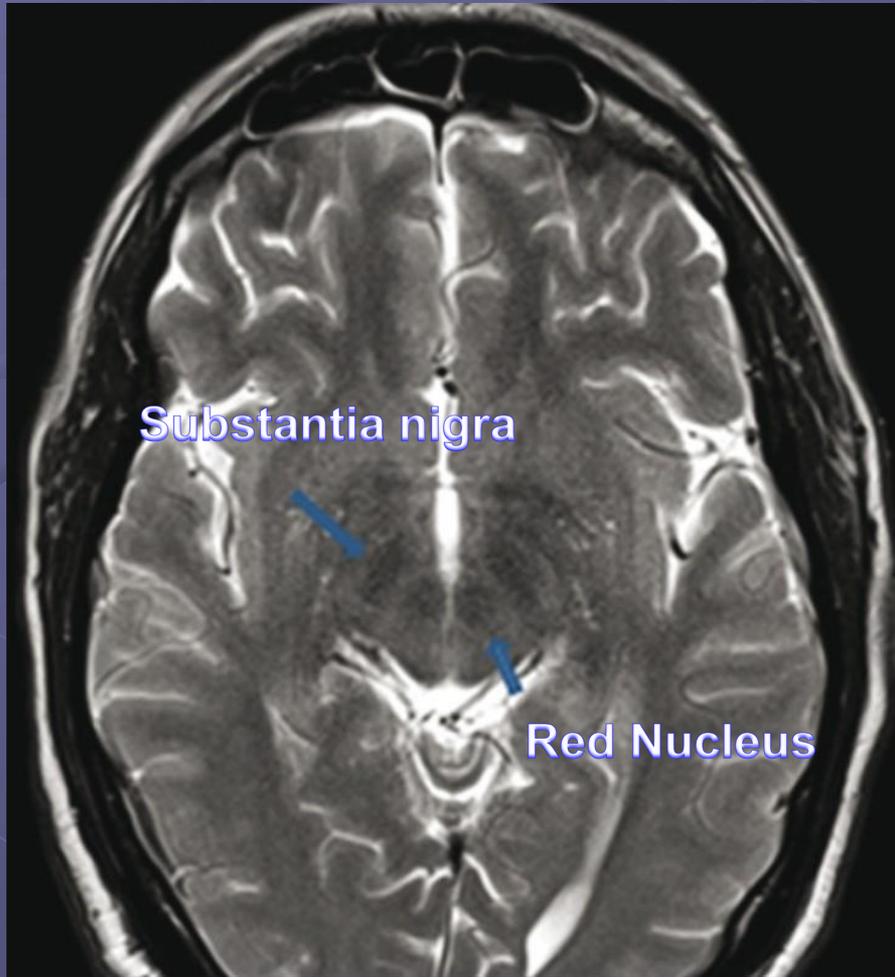
- End result of a lesion that damages the neuronal connections between the dentate nucleus of the cerebellum, the red nucleus, and the inferior olivary nucleus: the dentatorubral-olivary pathway.
- Associated with enlargement, rather than atrophy, of the affected structure—the inferior olivary neurons.
- **Most commonly occurs following development of focal lesions of the brainstem.**
 - ischemic infarction, demyelination, hemorrhage, tumor
- Delayed fashion, usually within 4–6 months
- Location
 - Superior cerebellar peduncle lesion – contralateral
 - Paramedian brainstem – ipsilateral
 - Paramedian and Superior cerebellar peduncle - bilateral

Hypertrophic Olivary Degeneration

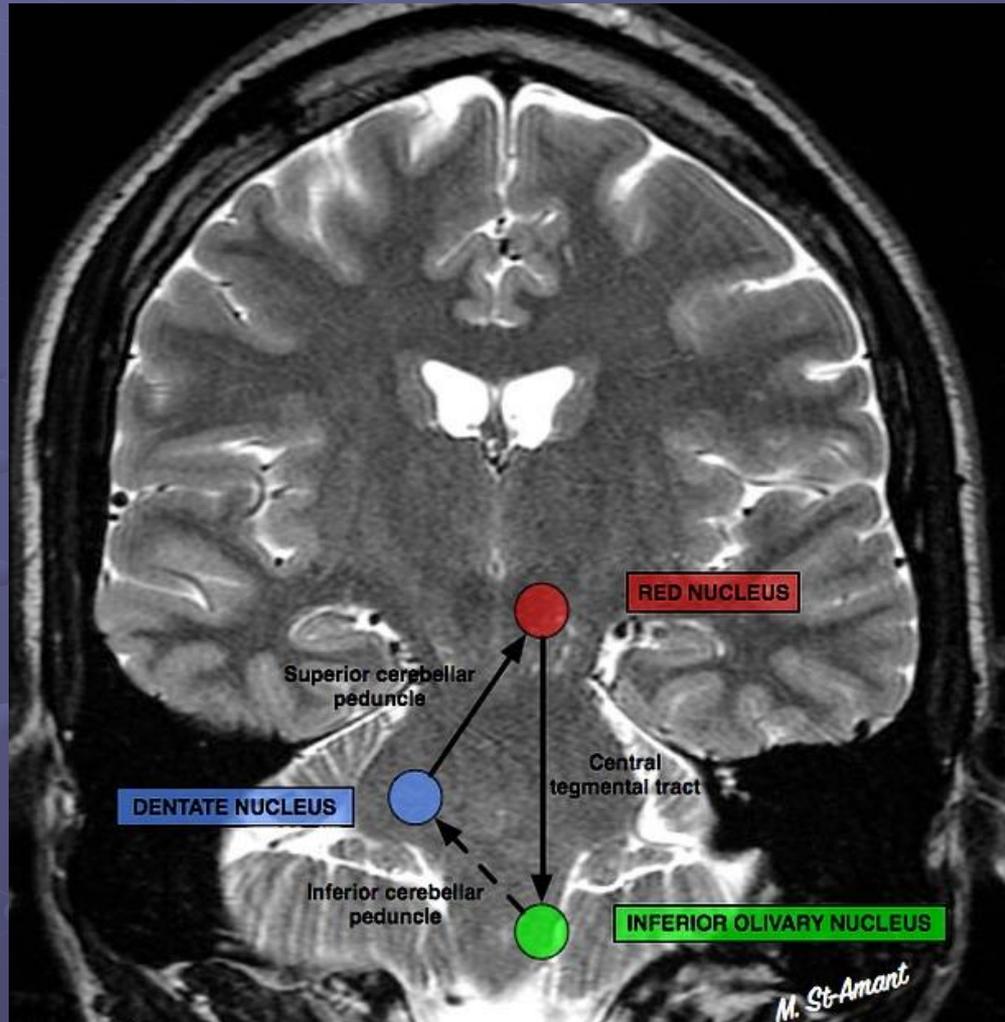


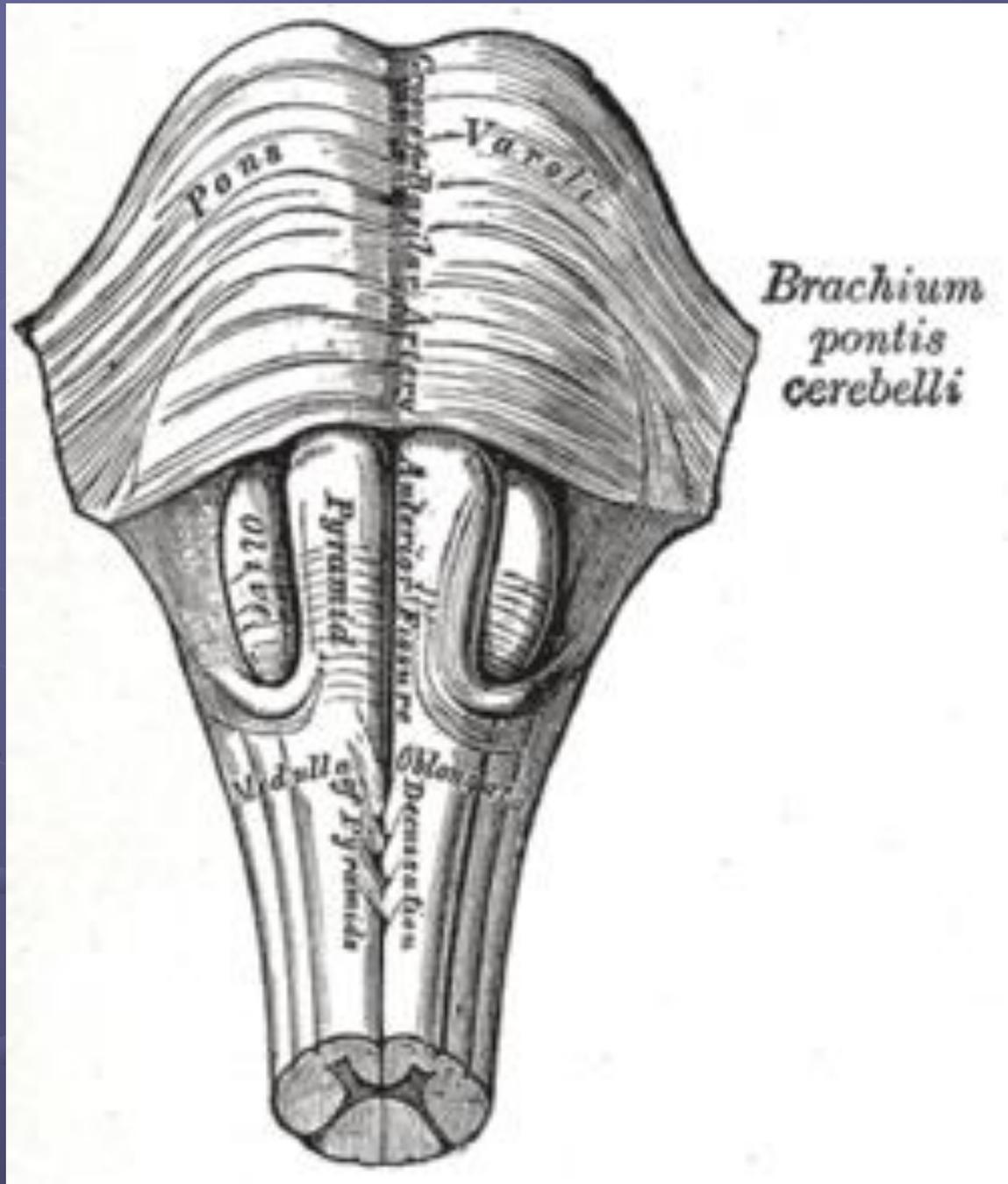
Interruption of the pathways composing the Guillain-Mollaret triangle.

HOD

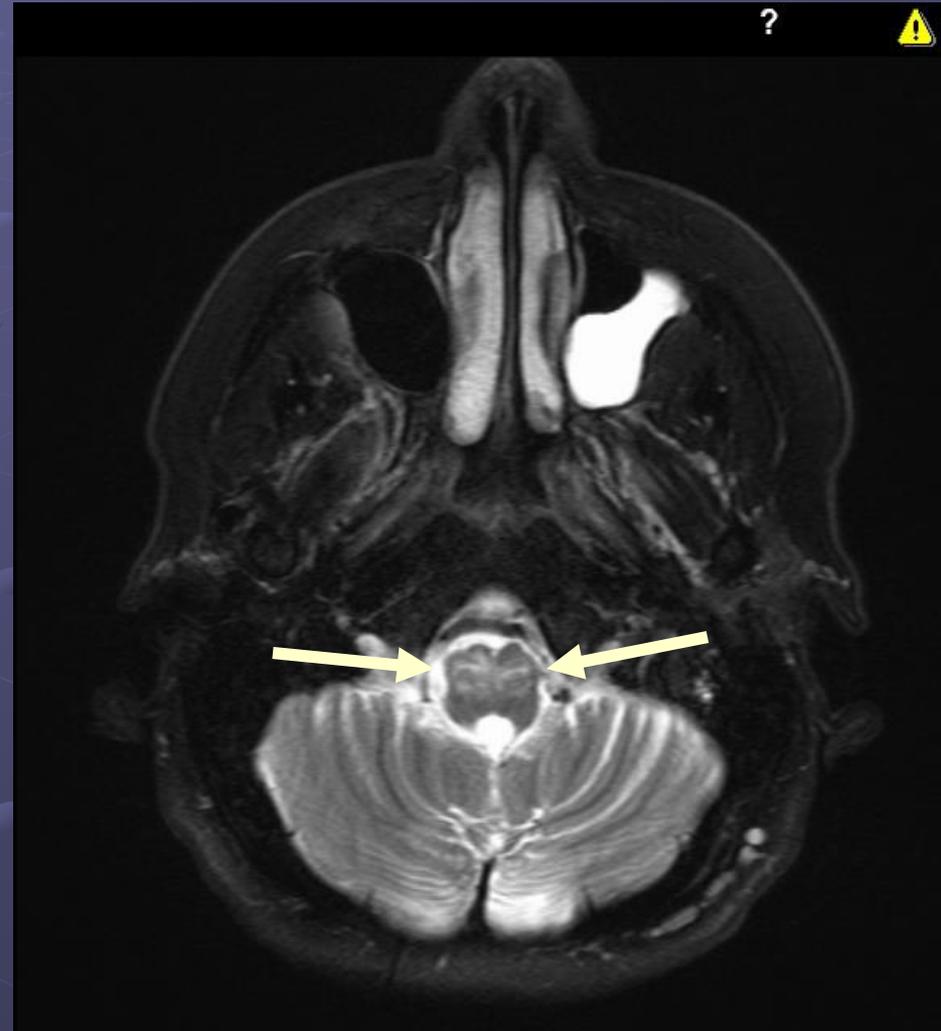
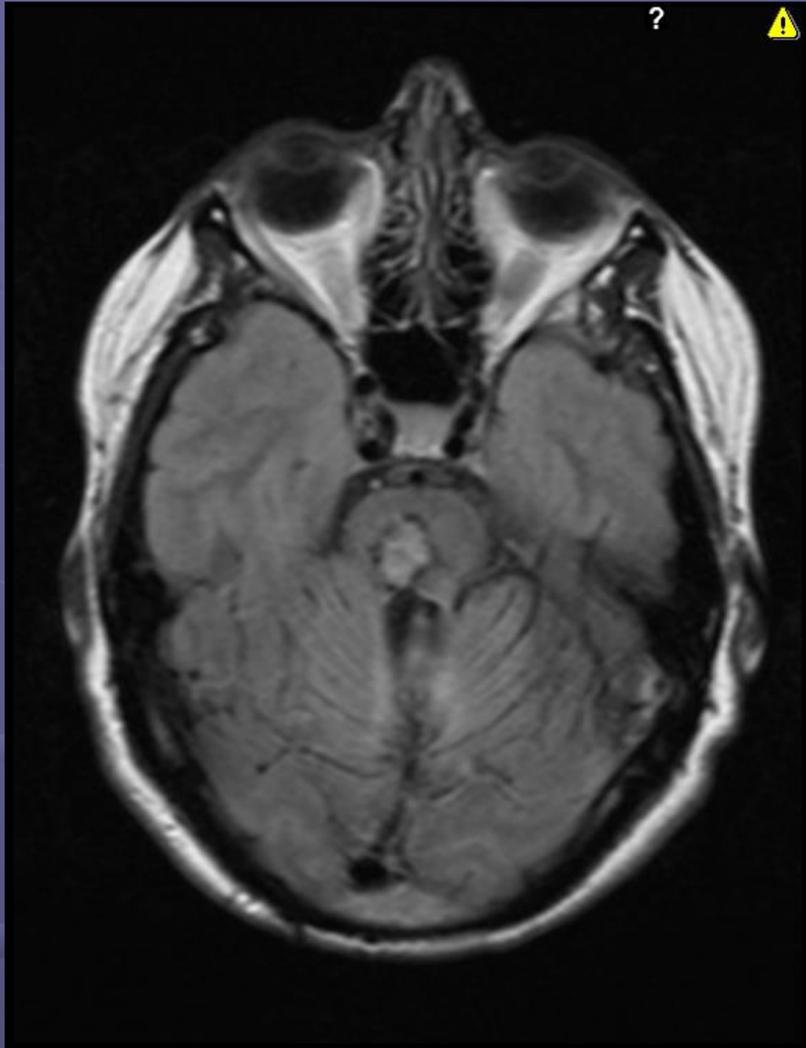


Guillain-Mollaret triangle





Hypertrophic Olivary Degeneration



HOD

● DDX:

- infarction
- demyelination related to multiple sclerosis
- tumor (eg, astrocytoma, metastasis, and lymphoma)
- infectious and other inflammatory processes such as tuberculosis, acquired immunodeficiency syndrome, sarcoidosis, and rhombencephalitis.

● However, if the lesion is strictly limited to one or both inferior olivary nuclei, with sparing of the surrounding medullary tissues, and particularly if there is associated focal olivary enlargement, hypertrophic olivary degeneration should be strongly suggested.