

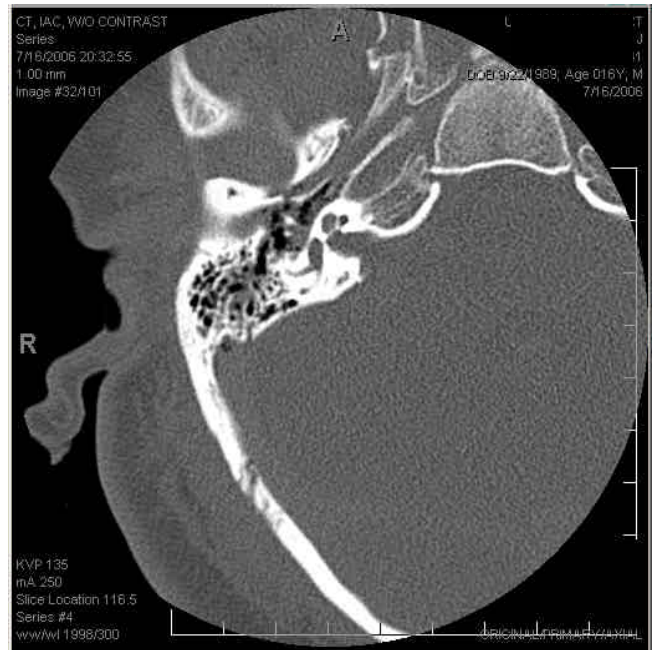
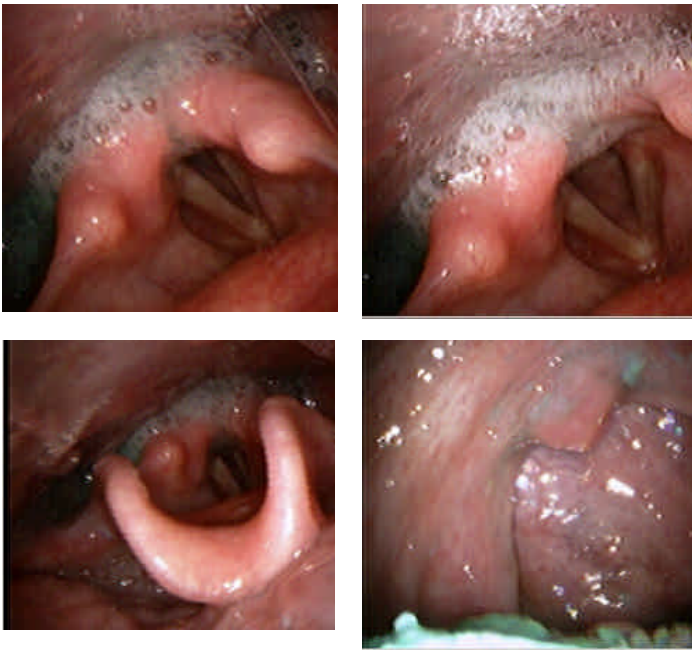
Jugular foramen syndrome:

Vernet syndrome or jugular foramen syndrome is involvement of the IX, X, and XI cranial nerves with the fracture. Patients present with difficulty in phonation and aspiration and ipsilateral motor paralysis of the vocal cord, soft palate (curtain sign), superior pharyngeal constrictor, sternocleidomastoid, and trapezius.

This syndrome may be caused by multiple etiologies including trauma or tumor growth

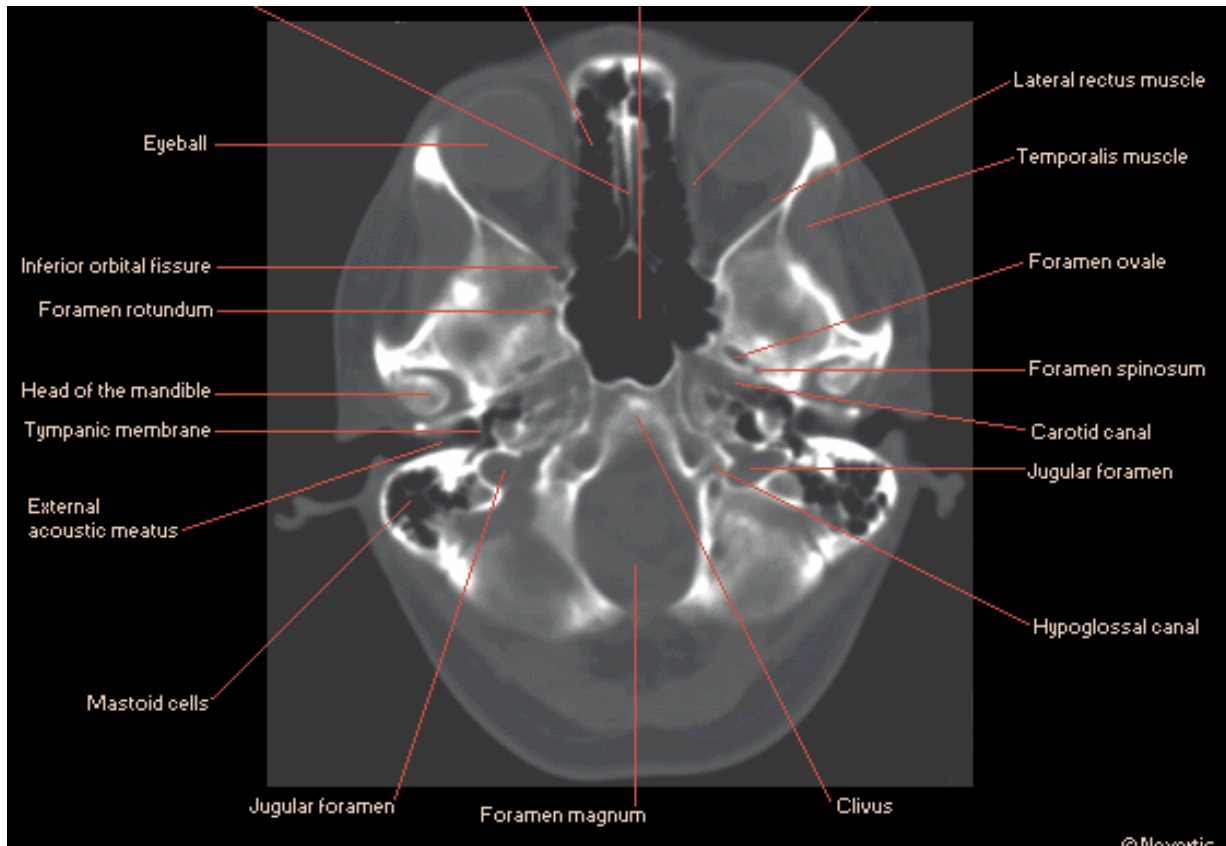
Early evaluation of skull base fractures and related complications has been discussed in many articles, but the timing of surgical interventions for basal skull fractures and related complications has not been standardized.

These syndromes describe exclusively patients with extracerebral lesions of multiple cranial nerves. "Central" syndromes of Schmidt and Vernet caused by brainstem lesion appear not to exist.



SYNDROME	CRANIAL NERVES	SITE OF INVOLVEMENT
Vernet's Syndrome	IX, X XI	Lesions in jugular foramen
Collect-Sicard Syndrome	IX, X, XI, XII	Lesions in retroparotid space
Vallaret's Syndrome	IX, X, XI, XII	Retropharyngeal extension
Schmidt's Syndrome	Sympatheic chain	Intradural extension
Avellis Syndrome	occasionally VII, X, XI	Intradural extension
Jackson's Syndrome	XI (accessory to X)	Occasionally inferior margin of JF
Tapia Syndrome	X, XI, XII	Intracranial extension before the nerves leave the skull base
Cerebellopontine angle syndrome	X, XII, occasionally	Lesions high in the neck
Garcin's hemibase Syndrome	XI, sympathetic chain ,VII, VIII, V	Extension into CP angle
	All cranial nerves on one side (often incomplete)	Infiltrative nasopharyngeal Ca.

http://www.thamburaj.com/jugular_foramen_lesions.html



Cranial Nerve	Foramen of skull
I (olfactory)	cribriform plate
II (optic)	optic foramen
III (oculomotor)	superior orbital fissure
IV (trochlear)	superior orbital fissure
V (trigeminal)	see below
V1 (ophthalmic)	superior orbital fissure
V2 (maxillary)	foramen rotundum
V3 (mandibular)	foramen ovale
VI (abducens)	superior orbital fissure
VII (facial)	internal auditory meatus
VIII (vestibulocochlear)	internal auditory meatus
IX (glossopharyngeal)	jugular foramen
X (vagus)	jugular foramen
XI (spinal accessory)	jugular foramen
XII (hypoglossal)	hypoglossal foramen

