Coma from supratentorial mass

General information

Central herniation and uncal herniation each causes a different form of rostral-caudal deterioration. Central herniation results in sequential failure of: diencephalon, midbrain, pons, medulla .

“Classic” signs of increased ICP (HTN, bradycardia, altered respiratory pattern) usually seen with p-fossa lesions may be absent in slowly developing supratentorial masses.

Distinction between central and uncal herniation is difficult when dysfunction reaches the midbrain level or below. Predicting the location of the lesion based on the herniation syndrome is unreliable.

Clinical characteristics differentiating uncal from central herniation

- decreased consciousness occurs early in central herniation, late in uncal herniation
- uncal herniation syndrome rarely gives rise to decorticate posturing

Differential diagnosis of supratentorial etiologies

1. vascular: stroke, intracerebral hemorrhage, SAH
2. inflammatory: cerebral abscess, subdural empyema, herpes simplex encephalitis
3. neoplastic: primary or metastatic
4. traumatic: epidural or subdural hematoma, depressed skull fracture.