Hydrocephalus differential diagnosis

Conditions that may mimic HCP but are not due to inadequate CSF absorption are occasionally referred to as “Pseudohydrocephalus” and include:

● “hydrocephalus ex vacuo”: enlargement of the ventricles due to loss of cerebral tissue (cerebral atrophy), usually as a function of normal aging, but accelerated or accentuated by certain disease processes (e.g. Alzheimer’s disease, Creutzfeldt-Jakob disease, traumatic brain injury). Does not represent altered CSF hydrodynamics, but rather the loss of brain tissue. See means of differentiating from true hydrocephalus

● developmental anomalies where the ventricles or portions of the ventricles appear enlarged: ○ agenesis of the corpus callosum: may occasionally be associated with HCP, but more often merely represents expansion of the third ventricle and separation of the lateral ventricles

○ septo-optic dysplasia

○ hydranencephaly: a post-neurulation defect. Total or near-total absence of the cerebrum, most commonly due to bilateral ICA infarcts. It is critical to differentiate this from severe (“maximal”) hydrocephalus (HCP) since shunting for true HCP may produce some re-expansion of the cortical mantle; see means to differentiate

Conditions that have been dubbed “hydrocephalus” but do not actually mimic the appearance of HCP:

● otitic hydrocephalus: obsolete term used to describe the increased intracranial pressure seen in patients with otitis media; see Idiopathic intracranial hypertension (IIH)

● external hydrocephalus: seen in infancy, enlarged subarachnoid space with increasing OFCs and normal or mildly dilated ventricles