

Evidence Discussion (HD-8.4)

- Initial neuroimaging for the evaluation of suspected Normal Pressure Hydrocephalus (NPH) includes CT head or MRI brain in patients with clinical symptoms and no explanation for hydrocephalus.
- Only a single modality study is indicated. The initial best modality is MRI Brain because of its higher intrinsic soft tissue resolution and because it can often be used as a pre-surgical exam.
- By using the appropriate single best test we avoid duplicate imaging and unnecessary radiation to the lens of the eye and other Head and neck structures
- Cine MRI showing hyperdynamic aqueductal CSF flow can also help in identifying shunt-responsive NPH patients.^{1,2, 3} The benefit of this exam is that it offers us functional information about CSF flow and can help improve patient outcomes.

References

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2. Capone PM, Bertelson JA, Ajtai B. Neuroimaging of Normal Pressure Hydrocephalus and Hydrocephalus. Neurologic Clinics. 2020;38(1):171-183. doi:10.1016/j.ncl.2019.09.003
3. Bradley WG Jr. CSF Flow in the Brain in the Context of Normal Pressure Hydrocephalus. AJNR Am J Neuroradiol. 2015;36(5):831-838. doi:10.3174/ajnr.A4124