Radionuclide shunt study

Radionuclide shunt studies have been used for decades to evaluate intracranial shunt patency (SP); however, the methodology is neither standardized nor well validated.

The radionuclide SP study is valuable for evaluation of VA SP. Results can be interpreted using a single variable (T½). T½ of 3.9 to 8 minutes indicates a patent shunt; T½ less than 3.9 minutes is consistent with overdrainage. T½ of >8 requires further evaluation to differentiate between obstruction and overdrainage/underdrainage [1)].

1)
Gok B, Batra S, Eslamy H, Rigamonti D, Ziessman H. Radionuclide shunt patency study for suspected ventriculoatrial shunt malfunction. Clin Nucl Med. 2013 Jul;38(7):527-33. doi: 10.1097/RLU.0b013e31828da385. PubMed PMID: 23640223.