Do Not Order Intracarotid Sodium Amobarbital Procedure (IAP Or Wada Test) Unnecessarily or Interpret it without Training

The intracarotid sodium amobarbital procedure (IAP or Wada test) is an invasive and risky diagnostic tool used to lateralize language and memory functions for surgical decision-making. This procedure involves injecting a sedative into one carotid artery to temporarily anesthetize one hemisphere of the brain while assessing the cognitive abilities of the other.

While historically considered the gold standard for this purpose, the Wada test is associated with potential complications such as stroke, infection, and embolism. Advances in neuroimaging, particularly functional MRI (fMRI), and preoperative neuropsychological evaluation have reduced the necessity for the Wada test in many cases. These alternative methods are less invasive, less expensive, and often provide sufficient information for surgical decision-making.

The Wada test should be reserved for specific epilepsy populations (e.g., right-handed patients with left temporal lobe epilepsy). Due to the complexity and potential risks of the procedure, it is essential that it is *administered* and *interpreted* by qualified professionals with competency training in psychometrics, brain-behavior relationships, and epileptology, typically, doctoral level clinical neuropsychologists or neurologists.

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