

Pituitary corticotroph adenoma diagnosis

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Pituitary MRI can localize microadenoma in only 50–60% of the cases as the size of the lesion is very small ¹⁾.

Although, dynamic studies have improved the sensitivity of MRI, it still fails to localize the adenoma in many cases ²⁾.

High Dose [Dexamethasone suppression test](#) (HDDST) has low sensitivity (65%) and specificity (60%) in predicting [Cushing's disease](#) ³⁾.

Bilateral [inferior petrosal sinus sampling](#) (BIPSS) series has shown the sensitivity of 88–100% and specificity of 67–100% in the localization of the [Cushing's disease](#) ⁴⁾.

The prediction BIPSS of for lateralization of the lesion in Cushing's disease has been questioned, with accuracies ranging from 50% to 100% ⁵⁾.

Bilateral inferior petrosal sinus sampling (IPSS) with corticotropin-releasing hormone (CRH) is currently the gold standard in the diagnosis of Cushing's disease (CD) and has also been used in tumour lateralization.

To establish a definitive [Pituitary corticotroph adenoma diagnosis](#) in the context of pre-existing [chronic kidney disease](#), the absence of circadian rhythms of [cortisol](#) and [ACTH](#) is a more sensitive indicator than 24-hour [urinary free cortisol](#) (24-UFC) and low-dose [dexamethasone suppression test](#) ⁶⁾.

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