

Standard ACTH Stimulation Test

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RSCCRR03051UAH Standard ACTH Stimulation Test

1. APPLICABILITY

This document is applicable at: UAH

2. PURPOSE

Used in the investigation of suspected adrenal insufficiency.

NOTE: Clinical assessment of patient should be considered prior to any dynamic testing.

Test should **NOT** be used:

- To diagnose secondary hypoadrenalism in patients with recent pituitary insult
- In patients with a primary diagnosis of Cushing's disease
- In acutely ill patients (i.e. trauma, sepsis)

3. PROCEDURE

| Step | Action |
|------|--|
| 1 | No strenuous exercise prior to or during the test. |
| 2 | Draw a baseline cortisol sample. |
| 3 | Inject (IV or IM) 250 µg ACTH (1-24). |
| 4 | Draw samples for cortisol at 30 and 60 minutes post-injection. |

4. REFERENCE INTERVAL

Peak cortisol levels above 500 nmol/L at 30 or 60 minutes excludes the diagnosis of primary adrenal insufficiency.

An abnormal or blunted response should be interpreted in conjunction with other clinical and laboratory data.

5. REFERENCES

Bornstein SR, Allolio B, Arlt W, Barthel A, Don-Wauchope A, Hammer GD, Husebye ES, Merke DP, Murad MH, Stratakis CA, Torpy DJ. Diagnosis and Treatment of Primary Adrenal Insufficiency: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab. 2016 Feb;101(2):364-89. doi: 10.1210/jc.2015-1710