



Which serum cortisol after high dose short synacthen test, 30 or 60 minutes?

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: Short synacthen (cosyntropin) test (SST), has replaced the insulin stress test as the first-line test to assess adrenal insufficiency and has received considerable attention regarding its sensitivity and specificity. The aim of this study, was to determine the utility of the 30 and 60 minute cortisol measurement in the high dose (250 µg) short synacthen test.

Material and Methods: Cross sectional study was conducted by reviewing the database of patients underwent short synacthen test in Al-Faiha Diabetes Endocrine and Metabolism Center (FDEMC) for the period from November 2009 to May 2013 in Basrah (Southern Iraq). Normal response: Post-stimulation serum cortisol should be greater than 20 µg/dL (555 nmol/L). The total enrolled patients were 435. The indications of the test in the figure.

Results: there will be 27.6 % false negative test if the 60 minute sample not taken. Only 5 (1.1%) patients with normal response at 30 minutes will regress to response at 60 minutes. The table show the sufficiency of short synacthen test.

Conclusion: measuring both 30 minute and 60 minute cortisol level are necessary and at 60 minute is fundamental in interpretation of short synacthen test.

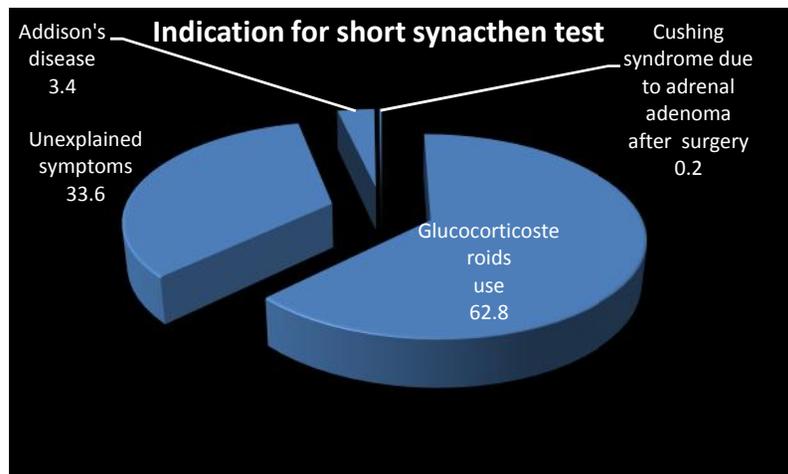


Table-Sufficiency of short synacthen test	%
Sufficient at both 30 minute and 60 minute	45.5
Insufficient at 30 minute only	12.9
Insufficient at 60 minute only	1.1
Insufficient at both 30 minute and 60 minute	40.5
Insufficient at 30 minute and sufficient at 60 minute	27.6