

Cortrosyn to Diagnose Adrenocortical Insufficiency

Obtain a baseline cortisol level. Dilute 0.25mg of Cortrosyn (Cosyntropin) vial with 1ml of 0.9% NaCl. Give IV push over 2 minutes. Normal patients will have a baseline cortisol level of greater than 5mcg/dL and a level of 18mcg/dL with an increase of at least 7mcg/dL 30 minutes after receiving Cortrosyn. If the level is taken 60 minutes after receiving Cortrosyn, there should be an increase of at least 11mcg/dL. The time of day that the test is given does not matter. If you get a subnormal cosyntropin test result, you must determine whether the patient has primary or secondary adrenocortical insufficiency. The manufacturer of Cortrosyn recommends that patients with subnormal cosyntropin test results be given 40 units of repository corticotropin injection IM twice daily for 4 days or 60 units twice daily for 3 days, followed by a second cosyntropin test. In patients with primary adrenocortical insufficiency, there will be little or no increase in plasma cortisol concentrations following the second cosyntropin test; patients with secondary adrenocortical insufficiency will have higher or even normal plasma cortisol concentrations.