

Standard Operating Procedures

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Name of Policy:	ACTH Stimulation Test	Departments:	All Departments
Category & No.:	LAB 4.1	Effective by:	10/1/2024
Version No.:	1	Revision History:	Original

Purpose: Used to diagnose Cushing's disease, to evaluate adrenal function after Cushing's disease treatment, as well as test for Addisons disease.

Background Information: Any other diagnostics should be performed before or after the test as it can affect the results.

Materials:

- 2 serum separator tubes
- 1 winged infusion set (butterfly) or 3 mL syringes
- 1-2 flushes
- Cortrosyn vial
- 1 cc syringes (for storing leftover Cortrosyn)
- Blank labels

Procedure:

- 1. Patient does not have to be fasted, but should not be fed during the stimulation test.
- 2. If the patient is already taking Trilostane/Vetoryl, confirm when the medication was given. The ACTH stimulation test should be performed 4 hours post medication.
- 3. Request ACTH stimulation test (test name Cortisol Serial 2) through ezyVet to Antech.
- **4.** Obtain patient's weight to calculate dose of Cortrosyn. The dose is 5 mcg/kg, and the concentration is 0.25 mg/mL. Do not give more than 1 mL.
- **5.** Check the freezer to see if there is any Cortrosyn already prepared. If not, see below on how to properly reconstitute Cortrosyn vials.
- **6.** Obtain pre-Cortrosyn blood sample using one of two methods:
 - **A)** using butterfly to obtain blood sample, then inject flush. Next, inject Cortrosyn dose through butterfly and flush again, OR
 - B) draw blood with a syringe, then inject Cortrosyn using a separate syringe and vein.
- 7. Inject blood sample into serum separator tube and label with patient's name and "pre."
- 8. Set a timer for 1 hour.
- **9.** After the hour is up, draw blood and inject it into serum separator tube. Label the tube with the patient's name and "post."
- 10. Both "pre" and "post" samples must be spun down.

Preparing Cortrosyn:

- 1. If Cortrosyn must be reconstituted; add 1 mL sterile saline into 1 vial of Cortrosyn.
- 2. Draw up the required amount for the patient.
- 3. Leftover Cortrosyn should be stored in 0.2 mL increments into 1 cc syringes in the freezer. Syringes must be clearly labeled with drug name, concentration, date, and initials of person that reconstituted it.
- **4.** When taking out frozen Cortrosyn for use, thaw it out by rolling it in between your hands and draw up the required amount. Any leftover unfrozen Cortrosyn must be discarded as it cannot be refrozen.

References: Please ask Internal Medicine if you have any questions.