WELLSPAN HEALTH – YORK HOSPITAL
NURSING POLICY AND PRCEDURE

LABORATORY SERVICES #SS-SP-31
SUPPORT SERVICES

DATES:	Effective:	July	2004
	Reviewed:	April	2009
	Revised:	April	2008

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Approved by: Practice Council

TITLE: CORTISOL AND CORTROSYN STIMULATION PROTOCOL

I. PURPOSE:

Protocol for placing an order for cortisol or cortrosyn stimulation in the computer, administering Cortrosyn (Cosyntropin) and for collecting a specimen when this procedure is ordered by the physician. This protocol is useful when evaluating adrenal function in patients with suspected adrenal insufficiency or congenital adrenal hyperplasia.

Baseline cortisol levels on inpatients will be drawn between 0700-0900 for Cortrosyn (Cosyntropin)stimulations and AM cortisol orders. It is recommended that the post injection level for the Cortrosyn Stimulation test be drawn at 30 and 60 minutes post Cortrosyn (Cosyntropin) administration. The physician may specify a different time interval.

II. EQUIPMENT & SUPPLIES:

1. Cortrosyn (Cosyntropin) 0.25 mg
2. Sterile normal saline solution to reconstitute the Cortrosyn (Cosyntropin)
3. 1-3cc syringe for drug administration
4. Patent IV site
5. SST (serum separator tube- gold) vacutainer tube(s)
6. Venipuncture adaptor and needle
7. Alcohol wipe
8. Gauze or adhesive bandage

III. PROCEDURE:

Preparation

A. (All Patients)

1. Confirm accurate patient identification. Ask patient to state name and date of birth and compare against the order or medication administration record.
2. Check blood pressure and known allergies.
3. Patient will need to have a minicath or patent IV site for IV administration of the cortrosyn.
4. Have Cortrosyn (Cosyntropin) at bedside prior to having baseline drawn.

B. (Inpatients- Non-ICU)

1. Explain the procedure to the patient/family prior to the procedure. Document on the education record.
2. Patient NPO after midnight is preferred. The study should be scheduled in the early

morning between 0700-0900. Hold am breakfast until after the test, unless otherwise directed.

3. A staff member of the nursing unit will order the test and page the phlebotomist for the 0700-0900 baseline cortisol level collection.

C. (Inpatients- ICU Protocol)

1. Test should be done within 2 hours of admission.
2. Test should be done prior to administration of Hydrocortisone, Solumedrol or Decadron.

D. (Outpatients)

1. Obtain consent from parent/guardian, if applicable.
2. Outpatient procedures should be scheduled a number of days in advance by contacting the Outpatient Infusion Center at Apple Hill at 741-8637.
3. Outpatients < 18 years old should have an adult stay with them.
4. Document procedure on the outpatient infusion record.

Laboratory collection and drug administration protocol

A. Inpatients (Non-ICU Protocol)

1. Phlebotomist will collect one (1) SST tube for the baseline cortisol level, label the specimen at the bedside and write "PRE" on the label.
2. Send the specimen to the lab.
3. The phlebotomist will notify the nurse or unit secretary that the baseline specimen has been drawn.
4. **The RN will administer 0.25 mg** Cortrosyn (Cosyntropin) **intravenously over 2 minutes immediately after blood specimen is collected.**
5. Patient should be monitored for reactions.
6. The nurse will page the phlebotomist with the time of the injection.
7. The phlebotomist will draw the second at 30 minutes, and a third at 60 minutes (or as ordered by the physician) after the injection. Label the specimen at the bedside and write "POST" on the specimen label.
8. If the physician orders additional laboratory tests, such as 17-HP or DHEA levels, notify phlebotomist prior to the "Post-draw" so additional SST tubes or the appropriate collection tubes can be obtained.
9. Deliver the specimen to the lab.

B. Inpatients (ICU protocol)

1. If patient has pre-existing a-line or central line, the nurse may draw the labs from those sites.
2. Phlebotomist or nurse will collect one (1) SST tube for the baseline cortisol level, label the specimen at the bedside and write "PRE" on the label.
3. Send the specimen to the lab.
4. **The RN will administer 0.25 mg** Cortrosyn (Cosyntropin)**intravenously over 2 minutes immediately after blood specimen is collected.**
5. Patient should be monitored for reactions.
6. The nurse will page the phlebotomist with the time of the injection, if needed.

7. The phlebotomist or nurse will draw a cortisol level 30 minutes and 60 minutes after the injection. Label the specimen at the bedside and write "POST-30 min" and "POST-60 min" on the specimen label.
8. If the physician orders additional laboratory tests, such as 17-HP or DHEA levels, draw additional SST tubes or the appropriate collection tube in other tests are ordered.
9. Deliver the specimen to the lab.

C. (Outpatient)

1. The nurse will place the mini-cath.
2. The nurse will collect one (1) SST tube for the baseline cortisol level, label the specimen at the bedside and write "PRE" on the label.
3. Send the specimen to the lab.
4. The RN will administer 0.25 mg Cortrosyn (Cosyntropin)intravenously over 2 minutes.
5. Patient should be monitored for reactions.
6. The nurse will draw a second cortisol level at 30 minutes and a third at 60 minutes (or as ordered by the physician) after the injection. Label the specimen at the bedside and write "POST 30 and POST 60" on the specimen label.
7. If the physician orders additional laboratory tests, such as 17-HP or DHEA levels, draw additional SST tubes or the appropriate collection tube in other tests are ordered.
8. Deliver the specimen to the lab.

IV. DOCUMENTATION:

Record on nursing cardex and patient medication cardex (inpatients).
Outpatient infusion record (outpatient).

V. APPLIES TO: PERSONS PERMITTED TO PERFORM

RN
LPN
PBT

VI. AREA PERFORMED:

All inpatient care areas and Outpatient Infusion Center at Apple Hill.

VII. REFERENCES:

- ☐ Review of literature
- ✓ Expert opinion Dr. Friedman, Dr. Bouder, and Dr. Stephen Manzella
- ☐ Guidelines
- ☐ Other _____

Annane D, et al. Effect of treatment with low doses of hydrocortisone and fludrocortisone on mortality in patients with septic shock. JAMA 2002; 288(7): 862-71.
York Hospital Laboratory Manual – also on iNET and CARElink

VIII. KEYWORDS:

ACTH stimulation

IX. DISTRIBUTION:

INET/My WellSpan
Signed Copy in Support Services-Main Lab

PROCEDURE HISTORY

VERSION #	DATE/INITIALS	REVISION DESCRIPTION
1	09/16/03 ess	New format adjustment
2	07/19/04 jww	Incorporate nursing into lab protocol
3	09/28/05 sly	Added to give medication immediately after lab draw.
4	4/26/06 sly	Added to have med at bedside prior to labdraw.
5	3/25/08 sly	Changed all draws to be baseline, 30 min and 60 min

APPROVED BY: **REVIEWED BY:**

Operations Manager	Date	Date	Initials	
Nursing-Medical Service Line	Date	Date	Initials	
Technical Director	Date	Date	Initials	