

## Supplementary Material

Protocol that was adopted for both the inpatient and outpatient management of patients following endoscopic surgery for pituitary adenomas starting March 2018.

### I. Fluid Management:

IV Fluids should be discontinued within 6 hours of completion of anesthesia provided that the patient is awake and alert and can take adequate oral intake

The foley catheter should be removed within 24 hours

### II. Postoperative Surveillance for Diabetes Insipidus:

Immediate postoperative labs

Basic Metabolic

Urine Specific Gravity

POD 0-1

Q8 hour Serum Na and Urine Specific Gravity

POD 2

Q12 hour Serum Na and Urine Specific Gravity

POD 3

Q24 hour Serum Na and Urine Specific Gravity

\*\* Triggers to send an additional Na and Urine Specific Gravity

Urine output > 250 cc/hr x 2 hours

Urine output > 400 cc/hr x 1 hour

Serum Na > 145

Urine Specific Gravity < 1.005

\*\* If DDAVP is required, the lab frequency should be increased to q8 hours for 24 hours.

### III. Postoperative Surveillance for Other Hormonal Derangements:

For secretory tumors: check ACTH or GH/IGF-1 or Prolactin as appropriate on POD1

Cortisol

If patient received stress dose hydrocortisone postoperatively, check AM cortisol 24 hours after discontinuation.

If patient received dexamethasone perioperatively, check AM cortisol 48 hours after discontinuation.

If patient did not receive steroids perioperatively, check AM cortisol on POD 1 and consider supplementation if it is < 4

### IV. Treatment for Diabetes Insipidus:

If patient is awake and alert with *intact* thirst mechanism

Maintain euvoolemia through oral intake

Consider administration of oral DDAVP (0.1 mg) if:

Na > 145 and specific gravity < 1.005

Unable to maintain euvoolemia

If patient is not awake and alert or *impaired* thirst mechanism

Maintain euvoolemia with IVF replacement of hypotonic fluid (1/2 NS)

Consider administration of DDAVP (1 mcg IV or 0.1 mg through NGT or OGT) if:

Na > 145 and specific gravity < 1.005

### V. Outpatient Management and Follow Up:

Patient Fluid Management Instructions

Drink fluids to thirst with plan to restrict to 1 L/day (4 glasses of water) x 7 days post op

If thirst is beyond restriction or excessive urination call endocrinologist

Follow-up Laboratory Studies at 7 days postop

Basic Metabolic

Consider additional labs as clinically warranted:

Am cortisol (Hold PM dose of hydrocortisone if on supplementation)

TSH, FT4

Urine specific gravity

ACTH or Prolactin or GH/IGF-1 for secretory tumors