

Multidisciplinary Pediatric Endocrine Surgery (MPES) Clinic Patients

Post-Thyroidectomy and Parathyroidectomy Protocol

(Revised Sept 27, 2018)

- Trach set at bedside used to emergently open wound should pt develop post-op neck hematoma
- Diet: clears on POD #0, ADAT on POD #1
- Abx: periop Ancef
- Avoid NSAIDS (Toradol, Motrin) x 48 hours post-op. Tylenol and narcotics ok.

For Total Thyroidectomy or Parathyroidectomy:

Do not follow for lobectomies unless completion thyroidectomy (go to Follow Up)

LABS:

- Obtain Serum Calcium/PTH @ 4 hours after surgery, if abnormal, obtain the following morning or sooner if indicated by clinical status.
- Normal values: Serum Ca 8.6 – 10.2 mg/dl, Ionized Ca 1.12 – 1.30 mmol/L, PTH > 10 pg/ml.

CONSULTS:

- Ped Endocrine for thyroid replacement (levothyroxine or cytomel) therapy, assistance with calcium management if necessary, and follow up.
- Nuclear Medicine (Anca Avram, MD) for Thyroid CA patients who may require post-op radio-iodine scan.

THYROID REPLACEMENT HORMONE (for discharge): Endocrine consultation

- If on levothyroxine at home, per Ped Endocrine recommendations
- **Synthroid** (or generic levothyroxine)
 - If cancer – brand name only (Synthroid)
 - If not cancer:
 - < 3 years of age brand name (Synthroid),
 - > 3 years of age: levothyroxine
 - Dose based on age - see page 2 table for doses - consult Ped Endocrine for exact dose.
- Tablets **ONLY!** Oral suspension has erratic bioavailability
- Should be counseled to take on an empty stomach, waiting 30 minutes before food, avoiding calcium, iron and soy around consumption.
- Thyroid CA pts requiring Iodine therapy (Nuclear Med): **Cytomel:**
 - Age ≤ 5 yrs: 5-15 mcg qday.
 - Age > 5: 25 mcg qday.
 - stop two weeks prior to Radioiodine scan and Rx

CALCIUM SUPPLEMENTATION (if PTH level low and patient has NO symptoms):

- 2.5 grams TUMS = 1000 mg elemental Ca
- Weekly taper: 1000 mg elemental Ca TID x 2 week -> BID x 1 week -> Daily until follow up with an iCal

HYPOCALCEMIA:

- Goal: total (> 7.2 mg/dL) or ionized (> 1.0 mmol/L) serum calcium
- Symptoms: perioral numbness/tingling, bilateral hand numbness/tingling, muscle cramping, irritability, muscle spasms, depression, psychosis, + Chvostek's sign, +Trousseau's sign
- Check magnesium: goal 1.7 - 2.4 mg/dL
 - IV magnesium sulfate 25 mg/kg/dose (max 2g/dose)

- Magnesium oxide 400 mg PO QDay to QID
- Magnesium carbonate 54 mg elemental Mg/5 mL: 10-20 mg/kg elemental magnesium QDay to QID
- Treatment
 - Symptomatic: IV calcium gluconate 50 mg/kg/dose (max 2 g/dose) -> recheck iCal q4h
 - Add Calcitriol (Rocaltrol): 0.25 - 0.5 mcg once daily per Ped Endocrine recommendations
 - Asymptomatic: Increase calcium carbonate by 20-30% (e.g. TID -> QID)
- Check labs every 4 hours

FOLLOW UP (additional information in F/U Protocol Information Sheet):

- Peds Endo/Surgery (MPES) clinic at 4-6 weeks: check TSH/FT4 and Serum Ca/PTH if Total Thyroidectomy. Drs. Thomas/Menon will follow Ca+ if low until follow up appointment. Please e-mail them at discharge if necessary.
- Follow up with Nuclear Med as indicated by team for thyroid cancer patients.
- Propranolol: decrease dose by half 2 days post-operative and discontinue at 5 days.

Levothyroxine dosage forms:

- Tablets (mcg): 25, 50, 75, 88, 100, 112, 125, 137, 150, 175, 200, 300 (doses could be in ½ tablets)

Usual starting dose for levothyroxine (Synthroid):

Age	Dose (mcg/kg)
1-3 mos	10-15
3-6 mos	8-10
6-12 mos	6-8
1-5 yrs	5-6
6-12 yrs	4-5
> 12 yrs	1.7-2