VENTURA COUNTY MEDICAL CENTER
CLINICAL PRACTICE GUIDELINE/PROTOCOL
POST TOTAL THYROIDECTOMY HYPOCALCEMIA PROTOCOL

The contents of this clinical practice guideline are to be used as a guide. Healthcare professionals should use sound judgment and individualize patient care. This CPG is not meant to be a replacement for training, experience, CME or studying the latest literature and drug information.

Check calcium, magnesium, phosphate, albumin in recovery and TID (@05:00, 13:00, 20:00) thereafter.
Check PTH and 25-OH Vitamin D in recovery.
Assess for symptoms of hypocalcemia every 4-6 hrs post op

Symptoms of hypocalcemia present

MODERATE
[Tetany; Trousseau's sign; Chvostek's sign; circumoral numbess]

TRANSFER TO MONITORED BED
(DOU/Telemetry/Recovery room)

Calcium gluconate 2000 mg (=180 mg elemental Calcium) IVPB over 10 mins**

SEVERE
[EKG changes such as U waves, QT prolongation, and/or ST/T wave changes; autonomic tetanic manifestations such as bronchospasm and/or diaphoresis

ICU ADMISSION

Asymptomatic

Calcium < 7 mg/dL

Calcium gluconate 5000-8000 mg (=450-720 mg elemental Calcium) in 1 L D5W over 24 hours

Re-check calcium, magnesium, phosphate & albumin within one hour of infusion completion

Calcium < 8 mg/dL

Add calcitriol 0.5 mcg PO daily

Normal Calcium

Discontinue IV calcium gluconate and change to calcium carbonate 1250 mg PO QID

Calcium = 7-8 mg/dL

Start calcium carbonate 1250 mg PO TID and follow daily calcium levels

If calcium < 8 mg/dL after 24 hours, add calcitriol 0.25 mcg PO daily and follow daily calcium levels

If calcium < 8 mg/dL after another 24 hours, increase calcium carbonate to 1250 mg PO QID

Normal Calcium

Check labs in AM or in 6 hours

**** TO PUSH IV CALCIUM, THE PATIENT MUST BE ON A CARDIAC MONITOR.**
IF THE PATIENT IS ON A MEDICAL-SURGICAL (NON-MONITORED) UNIT AND THERE IS NO BED IN A MONITORED UNIT IMMEDIATELY AVAILABLE, A CRASH CART MONITOR CAN BE USED

ONLY A PHYSICIAN OR TSN CAN PUSH IV CALCIUM

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NOTES:

1. Normal corrected Calcium level = 8.5-10 mg/dL; Goal Ca: 8.5 mg/dL.
2. 1000 mg calcium gluconate = 10 mL of 10% calcium gluconate.
3. Hypomagnesemia (<1.1 mg/dL) inhibits PTH secretion and needs to be corrected if present. Goal Mg: >2 mg/dL.
4. Fine tuning of calcium can be done in Endocrine clinic with changes in vitamin D replacement.
5. Chronic hypoparathyroidism can be diagnosed 2 – 3 months post-surgery with persistently low calcium and inappropriately low PTH.
6. Consider addition of thyroid replacement therapy.
7. 1000 mg calcium gluconate = 90 mg elemental Calcium
8. 1250 mg calcium carbonate tablet = 500 mg elemental Calcium