Thyroidectomy & Parathyroidectomy Anesthesia

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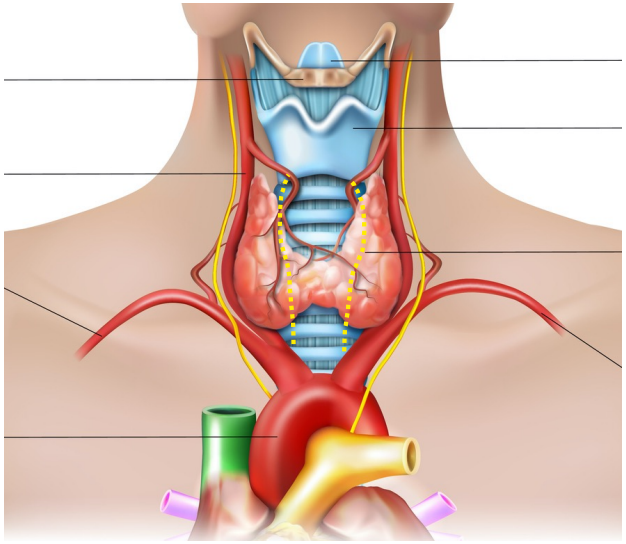


Setup Checklist

- ☐ Propofol gtt
- ☐ 2nd IV setup

For Recurrent Laryngeal Nerve Monitoring

- ☐ EMG neuromonitoring ETT
- ☐ Remifentanil gtt

Pre-Op

Recent TSH/Free T3

Evaluate airway

- Direct tracheal compression?
- Mediastinal extension with mass effect?

Access

Parathyroidectomy requires 2nd IV for intra-op PTH monitoring

Often in foot for easy intra-op lab draws

Monitoring

+/- RLN monitoring (surgeon preference)

Induction

*Long-acting paralytic **contraindicated** with RLN monitoring*

Anesthesia

TIVA or background propofol gtt for PONV

Remifentanil for still operating field if avoiding NMB

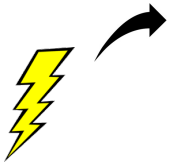
Extubation

Avoid cough (↑ *hematoma risk)*

Special Considerations

	Thyroidectomy	Parathyroidectomy
Recurrent Laryngeal Nerve Monitoring • Spontaneous-EMG based to "map" RLN • Surgeon stimulates RLN → vocal cord adduction (picked up by neuromonitoring ETT) • Paralysis contraindicated • No issue with inhaled anesthetic	+	+/-
	(surgeon preference)	
Intra-Op PTH Monitoring • PTH half-life ~ 4 minutes • Intra-op monitoring ensures adequate gland removal	*Rare*	+

Thyroid Storm



Thyroid Storm

Surgery/trauma

Hyperpyrexia, tachycardia, AMS, vomiting/diarrhea

- *Most common 6-24 hours post-op*
- *Rare unless severe hyperthyroid*
- *Differentiate from MH: lack of muscle rigidity, later post-op onset*

Treatment

- Beta-blockade
- Methimazole/PTU
- Hydrocortisone
- Iodide (after PTU)

**Methimazole contraindicated in pregnancy*

Post-Op Complications

- **RLN injury**
  - Unilateral = hoarse
  - Bilateral = stridor, aphonia, respiratory distress
- **Hematoma**
  - Potential to compress airway
  - Evacuate for severe distress
- **Hypocalcemia**
  24-48h most common, rarely 1-3h