Follicle Cavity↑
  
  O2 consumption↑
  glycolysis↑
  cholesterol synthesisThermogenic↑
  neuro-muscular excitability↑
  #-adrenergic receptors↑
  sensitivity to catecholamines↑
  adrenergic receptors↑
  sensitivity to catecholamines↑
  entero-hepatic circulation↑

» Life threatening
» Challenging to recognize
» No definitive diagnostic criteria
» Lab results identical to thyrotoxicosis

» Body ache
» Shortness of breath
» Fever: 105° F
» Tachycardia: 195 beats/minute
» Tachypnea: 72 breaths/minute
» Altered mental status

Differential:
» Substance ingestion (cocaine)
» Neuroleptic malignant syndrome
» Sepsis
» Pheochromocytoma

» Triggered by:
  » Infection
  » Surgery
  » Trauma
  » Other critical illness

» Most often seen in Graves disease

» Life threatening

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» Life threatening
Prevent further systemic decompensation
- Cholestyramine
- Dexamethasone

Counteract ongoing clinical manifestations
- Esmolol infusion
- Cooling blanket
- Acetaminophen

Inhibit thyroid hormone production and release
- Methimazole
- Lugol's iodine solution

↑ AST / ALT
↓ plt count

Urgent total thyroidectomy

High mortality
> 10-75%

Low threshold for suspicion

Preoperative optimization may ease intraoperative management

Rare > 1-2% of hospital admissions for thyrotoxicosis

References: