

□ Neurogenic Fever

Neurogenic fever is a [non-infectious](#), centrally mediated elevation of [body temperature](#) resulting from [acute brain injury](#), typically without identifiable infection or systemic inflammation.

□ Key Characteristics

- □ **Cause:** Disruption of hypothalamic thermoregulation due to:
 1. Subarachnoid hemorrhage
 2. Traumatic brain injury (TBI)
 3. Stroke
 4. Brain tumors or surgery
- □ **Mechanism:** Dysautonomia, hypothalamic injury, cytokine release
- □ **No infection:** Negative cultures, normal procalcitonin/CRP
- □ **High fever:** Often >39°C, resistant to standard antipyretics
- □ **Pattern:** Persistent or episodic, non-circadian

□ Diagnostic Clues

Feature	Neurogenic Fever
Onset	24–72 h after CNS insult
Infection workup	Negative
Response to antipyretics	Minimal or absent
Pattern	Persistent or paroxysmal
Autonomic signs	Tachycardia, hypertension, diaphoresis

⚠ Clinical Importance

- Often misdiagnosed as sepsis or infection
- Leads to **antibiotic overuse**, delayed diagnosis, and prolonged ICU stay
- May require:
 1. External cooling
 2. [Bromocriptine](#)
 3. [Beta-blockers](#)
 4. [NSAIDs](#)
 5. [Clonidine](#)

□ Differential Diagnosis

- Infectious fever (pneumonia, UTI, meningitis)
- Drug fever
- Deep vein thrombosis / PE
- Autoimmune or paraneoplastic fever

Early recognition of neurogenic fever allows for targeted management and avoidance of

unnecessary antibiotics or invasive tests.

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