Troubleshooting tachycardia

Verify pulse >180 bpm

Assess anesthetic depth

Inadequate plane of anesthesia?

Yes

Verify ETT placement and seal, increase vaporizer and/or administer analgesic

No

Hypoxemia – SpO₂<90%

Yes

Check patient airway and oxygen source – see hypoxemia algorithm

No

Hypotension

SAP <90 mmHg

MAP <60 mmHg

Yes

See hypotension algorithm

No

Suspect hypovolemia?

Yes

Administer fluid bolus – 15 ml/kg crystalloid. Does the HR decrease? YES – keep monitoring

No

Medications – atropine, glycopyrrolate, dopamine, dobutamine, epinephrine/adrenaline, ketamine, ephedrine

Yes

Discontinue medication, disconnect the fluid line containing the drugs listed, flush and reattach to patient

No

Hyperthermia – >39.5°C [103.1°F]

Yes

Discontinue active warming

No

Elevated ETCO₂, shallow breaths?

Yes

Decrease vaporizer setting. Assist or control ventilation

No

This algorithm is from the AAFP Feline Anesthesia Guidelines, published in JFMS in July 2018 and available at catvets.com/guidelines

Key

ETCO₂ = end-tidal carbon dioxide; ETT = endotracheal tube; MAP = mean arterial pressure; SAP = systolic arterial pressure; SpO₂ = oxygen saturation of hemoglobin in arterial blood