**PANTING***

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### INVESTIGATION

**True panting:**
- Extremely rapid rate
- Lips pulled back throughout inspiration; nares quivering during expiration
- Move freely, no positional restrictions
- Tongue often protruded

**May be normal:**
- With exertion, stress, heat, excitement

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### DIFFERENTIAL

**Increased body temperature**

**Obese, overweight**

**Endocrine disease**

**Pain**

**CNS disease**

**Behavioral issue (eg, anxiety)**

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### RESULTS

**Normal environmental temperature**

**Increased environmental temperature**

**Fever**

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### TREATMENT

**Institute cooling**

**Institute weight-loss program**
- Avoid excess exertion, heat

**Further diagnostics (eg, imaging) for source of pain**

**Analgesic trial**

**CNS disease affecting respiratory center**
- Post-ictal

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### INVESTIGATION

**Routine database**
- Infectious disease screening
- Imaging
- Further tests pending initial results

**Hyperadrenocorticism**

**Hyperthyroidism**

**Pheochromocytoma**

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**Compatible clinical signs?**
- Routine database
- UCCR, LDDS, ACTH stimulation
- Abdominal ultrasound

**Compatible clinical signs?**
- Routine database
- TT4, FT4, TSH

**Compatible signs?**
- Routine database
- Abdominal ultrasound/CT
- Urine metanephrine testing
- Inhibit level
- Blood pressure measurement

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* Differentials here are more relevant to dogs, but information pertinent to cats (eg, young cat cardiorespiratory, hyperthyroid) is relevant where necessary.

** If a young cat is presented with panting, cardiorespiratory disease must be ruled out.
Respiratory disease (eg, laryngeal paralysis, infiltrative pulmonary disease)

Cardiac disease** (eg, congestive heart failure, pulmonary hypertension)

Acidosis

Hypertension

Medications

INVESTIGATION
- Blood pressure measurement
- Investigate for underlying disease (eg, renal disease)

INVESTIGATION
- Steroids
- Excessive thyroid supplementation
- Diazepam
- Opioids (eg, hydromorphone)

INVESTIGATION
- Blood gas
- Routine database

INVESTIGATION
- Open-mouth breathing caused by respiratory distress:
  - Flaring of nostrils and/or drawing back of lip commissures during inspiration
  - Extension of neck
  - Abduction of elbows
  - Comfortable only when standing or in sternal recumbency

ACTH = adrenocorticotropic hormone
CT = computed tomography
fT4 = free thyroxine
LDDS = low-dose dexamethasone suppression
TSH = thyroid stimulating hormone
TT4 = total thyroxine
UCCR = urine cortisol: creatinine ratio

Reference