Feline Arterial Thromboembolism (FATE)

Emergency Protocol: Recognition, Acute Management & Prevention

RECOGNITION: THE 5 P's OF FATE

PAIN	PARALYSIS	PULSELESSNESS	PALLOR	POIKILOTHERMIA
Acute, severe vocalization agitation	Flaccid hindlimb(s) ± forelimb lower motor neuron	Absent femoral pulses bilaterally (or unilateral)	Pale/cyanotic nail beds and paw pads	Cold distal limbs compared to proximal

PREVALENCE	CONCURRENT CHF	ACUTE SURVIVAL	MEDIAN SURVIVAL
~15% of cats have heart disease (HCM most common)	~70% of FATE cats have concurrent CHF at presentation	~50% survive acute episode with palliative care	4-6 months median for survivors (recurrence common)

ACUTE MANAGEMENT PROTOCOL

1. STABILIZE	2. PAIN CONTROL	3. ANTICOAGULATION	4. CHF ASSESSMENT
• Oxygen supplementation • Minimize stress/handling • IV catheter (front leg) • Keep warm (blankets) • NPO initially	**Opioids essential:** • Buprenorphine 0.02 mg/kg • Fentanyl patch (25 mcg) • Methadone 0.1-0.3 mg/kg *Pain worsens CHF!*	**Unfractionated heparin:** • 250 units/kg SQ TID • First 24-48 hours **Start Clopidogrel ASAP:** • Loading: 75 mg x 1 • Maintenance: 18.75 mg SID	**70% have concurrent CHF!** • T-FAST for B-lines • Check RR (>40 = concern) • Thoracic rads if stable If CHF: Furosemide 1-2 mg/kg

ONGOING CARE & MONITORING

PARAMETER	FREQUENCY	ACTION THRESHOLD
Respiratory rate	q2-4h initially	RR >40 → assess for CHF, increase furosemide
Heart rate & rhythm	q4-6h + ECG PRN	Arrhythmia → reperfusion injury? hyperK?
Limb perfusion	q4-6h	Improving = good; necrosis → possible amputation
Temperature	q4-6h	Keep normothermic; hypothermia slows recovery
Renal function	q24-48h	Increased creatinine may = renal clot or reperfusion
Potassium	q12-24h	Hyperkalemia = reperfusion injury (monitor ECG)
Physical therapy	q6-8h when stable	ROM exercises; prevent contracture

FATE: Chronic Management

Prevention Protocol: Thromboprophylaxis & Risk Stratification

CHRONIC THROMBOPROPHYLAXIS

DRUG	DOSE	CLINICAL NOTES	EVIDENCE
Clopidogrel (FIRST LINE)	18.75 mg/cat PO SID (1/4 of 75mg tablet)	• Loading dose: 75 mg x 1 • Use gel caps to hide bitter taste • Irreversible platelet inhibition • Withdraw 5-7 days before surgery	FAT CAT Study: 8.5 months longer to 2nd event vs aspirin
Rivaroxaban (ADD-ON)	2.5 mg/cat PO SID	• Factor Xa inhibitor • Add to clopidogrel for high-risk cats • Limited clinical data available	PK/PD studies only; no outcome data yet
Aspirin (SECOND LINE)	20 mg/cat q72h (1/4 baby aspirin)	• Only if cannot use clopidogrel • Can add to clopidogrel • Higher GI side effects	Inferior to clopidogrel in FAT CAT study
LMWH (Dalteparin)	100-150 U/kg SQ q12-24h	• Very expensive ($200-300/month) • Injectable only; short-term acute use	Limited data; q6-12h dosing may be needed

WHEN TO START PROPHYLAXIS

LOW RISK (Monitor only)	MODERATE RISK (Consider clopidogrel)	HIGH RISK (Start clopidogrel)
• HCM with normal LA size • LA:Ao <1.5 • No spontaneous contrast • Normal LAA velocity (>0.4 m/s)	• Mild-moderate LA enlargement • LA:Ao 1.5-2.0 • Any gallop sound present • History of arrhythmias	• Severe LA enlargement (LA:Ao >2.0) • Spontaneous echo contrast ("smoke") • Prior ATE event (secondary prevention) • Low LAA velocity (<0.25 m/s) • Visible thrombus on echo

PROGNOSIS & OUTCOMES

OUTCOME MEASURE	VALUE	NOTES
Acute survival (palliative care)	~50%	Similar outcomes to thrombolytic/surgical approaches
Time to limb function return	Hours to 6 weeks	Variable; some cats need amputation
Median survival (post-event)	4-6 months	With appropriate chronic management
Recurrence rate	Common	Even with clopidogrel therapy
5-year ATE risk (cats with HCM)	~10%	Based on REVEAL study data

CLIENT COMMUNICATION POINTS

• **50/50 survival:** "About half of cats survive the acute crisis with supportive care." • **Underlying cause:** "FATE occurs because of severe heart disease that we cannot cure, only manage." • **Recurrence risk:** "Even with medication, there's a significant chance this could happen again." • **Recovery timeline:** "Limb function may take days to weeks to return. Some cats need amputation." • **Median survival:** "Cats that survive typically live 4-6 months, though some do much better." • **Quality of life:** "Euthanasia is a compassionate option if suffering cannot be managed." • **Home care:** "Physical therapy, keeping warm, litter box assistance, and close monitoring are essential."