Common Cardiac Arrhythmias

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NORMAL HEART RATE (dogs, 70–160 bpm; cats, 140–220 bpm)

Are all QRS complexes supraventricular?

No

Underlying sinus rhythm with VPCs

• Rule out cardiac/systemic disease
• Rule out infectious agents producing myocarditis
• Treat underlying cause
• 24-hour Holter monitoring to determine need for treatment and/or therapeutic efficacy
• Rapid suppression achieved via IV lidocaine or procainamide (bolus, may require CRI)
• Oral maintenance therapy via sotalol, mexiletine, or less commonly amiodarone

Accelerated idioventricular rhythm

Identify and treat underlying cause

Yes

Normal P wave preceding all QRS complexes?

No

Underlying sinus rhythm with supraventricular premature complexes

• Identify and treat underlying heart disease
• In patients with paroxysms of SVT, treatment with digitalis, calcium-channel blockers, or β-blockers may be required to slow heart rate; sotalol or amiodarone may resolve arrhythmia

Yes

Does the underlying R-R interval vary by >10%?

No

Sinus rhythm (normal for dogs and cats)

Sinus arrhythmia (usually normal, especially in dogs)

No treatment required; P wave morphology may vary in patients displaying wandering pacemaker

FOR MORE...

Look for more algorithms on cardiac arrhythmias in the next issue.