

Atropine Induced Paradoxical Atrioventricular Conduction Block in a Dog

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A 6-month-old intact male Jindo dog was underwent surgery for hip fracture caused by hit by a car. Routine laboratory tests performed prior to surgery found no significant abnormalities, which might increase risks associated with general anesthesia. The dog was premedicated with atropine, induced general anesthesia with thiopental sodium and maintained with isoflurane. Forty minutes after surgery, the dog was suddenly bradycardic. Atropine (18 ug/kg) was slowly infused intravenously to normalize heart rate. However, paradoxically the dog showed slower heart rate with intermittent atrioventricular block (2nd degree type I) after atropine infusion. The dog's rhythm was returned to normal rate 7 minutes after ephedrine was infused. This is a rare case of paradoxical atrioventricular block induced by high dose of atropine in a dog.

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