TABLE 1

Intravascular Volume Assessment

Criteria	Hypovolemia	Hypervolemia*
Patient history	Vomiting, diarrhea, decreased water intake, anorexia or hyporexia, respiratory signs, fever, blood loss and hemorrhage	latrogenic fluid overload, polydipsia, salt intoxication, osmotic agent administration
Physical examination findings	See Table 2 Can occur with severe dehydration (>12%) May see evidence of hemorrhage (bleeding, epistaxis, etc.)	Bounding pulse quality, new cardiac murmur, wet lung sounds, ocular/nasal discharge, jugular vein distention, peripheral edema
Blood pressure or electrocardiogram findings	Hypotension, arrhythmia	Arrhythmia
Laboratory test results	Hyperlactatemia, metabolic acidosis, acute anemia, hypoproteinemia (may be secondary to hemorrhage)	Hemodilution of packed cell volume, blood urea nitrogen, and electrolytes
Diagnostic imaging results (e.g., radiography, ultrasonography, computed tomography)	Microcardia, small caudal thoracic vena cava, caudal vena cava collapsibility index >27%	Abdominal venous distension, caudal vena cava collapsibility index <27%, pleural effusion, ascites, retroperitoneal effusion, perirenal effusion

*Usually occurs in conjunction with signs of overhydration of the interstitial space (see Tables 4 and 5).

The 2024 Fluid Therapy Guidelines for Dogs and Cats are available at aaha.org/fluid-therapy.

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