**Oxygen Therapy**

The presence of pulmonary edema in animals with CHF increases the alveolar-arterial diffusion distance for oxygen to pulmonary capillaries. Supplemental oxygen administration increases the alveolar-arterial diffusion gradient and thus increases arterial oxygen content. Oxygen may be administered via oxygen cage, flow-by method, nasal cannula, or oxygen collar (constructed by covering the ventral 50–75% of an Elizabethan collar with plastic wrap and taping oxygen tubing along the ventral aspect of the collar). The oxygen cage may prove least stressful for the patient but is expensive because high flows of oxygen are required to achieve therapeutic concentrations (>40% inspired oxygen). The oxygen collar has the potential to achieve very high concentrations of inspired oxygen (up to 80%) but may require light sedation to increase patient compliance.

Source: <http://www.merckmanuals.com/vet/circulatory_system/heart_disease_and_heart_failure/heart_failure.html>