Garden Hose Scalding—An Unexpected Syndrome

This study evaluated dermal biopsy submissions from 10 canine cases (22 samples) in which thermal burns from garden hose water were suspected based on patient history, lesion distribution (linear burn along the dorsum), gross and histologic appearance (second- or third-degree thermal burn), time of the year (May–August), and location (western or southern states).

All cases had histologic features of second- or third-degree thermal burns characterized by full- or partial-thickness coagulative necrosis of the dermis and epidermis, including the adnexal epithelium. Scald burns such as these have a different pathophysiology from contact burns. Contact burns result in immediate coagulation and eschar formation, which can cause a clear line between viable and nonviable tissue. In scald burns, there is a delayed onset of vascular damage and often no necrotic layer to block heat conduction to the deep vascular plexus, making it vulnerable and prone to damage.

Signs of the burn may, therefore, not be apparent for several days and even the most superficial burns can lead to significant scarring. Owners and veterinarians should be cautioned about the risk for garden hose scalding syndrome, especially for pets that live in a hot climate or have an appropriate history and distribution of lesions.

Commentary

Garden hose scalding syndrome is not a phrase that typically comes to mind when discussing with pet owners the risks associated with summer. Although the results of this study were mostly intuitive, it is surprising that water sitting in the sun can become hot enough to cause second- or third-degree burns. Client education during the hot months (especially in western or southern states) should be emphasized.—*Heather Troyer, DVM, DABVP, CVA*

Source

A case series of thermal scald injuries in dogs exposed to hot water from garden hoses (garden hose scalding syndrome). Quist EM, Tanabe M, Mansell JEKL, Edwards JL. ***VET DERMATOL*** 23:162-e33, 2012.

Anesthesia for Chinchillas

Small body size, narrow airways, and high metabolic rate make anesthesia of chinchillas challenging. In addition, because cardiomyopathy and valvular disease have been described in chinchillas, thoracic auscultation should be performed. The need for preoperative blood analysis should be balanced against the possibility of blood loss. A drop of blood for glucose measurement can be obtained from an ear vessel. Fasting and water deprivation before anesthesia are rarely necessary, as chinchillas cannot vomit and fasting can increase risk for hypoglycemia. An induction chamber (if used) should be different than one used for small carnivores (eg, ferrets) to avoid the smell of a predator. If an induction chamber is not used, supplementary oxygen should be provided via facemask immediately before and during induction. Volatile agents were often preferred for maintenance of anesthesia because of greater control over anesthetic depth than when injectables are used alone. Because of high metabolic rate and incidence of subclinical respiratory disease in chinchillas, supplemental oxygen should be given throughout anesthesia. Ophthalmic lubricant should be applied liberally. Fluid administration rates depend on ongoing fluid losses and the expected effects of drugs used on the vascular tone; 10 mL/kg/hr for crystalloid fluids should be the starting point. Because of the large surface area:body weight ratio, strategies to avoid hypothermia should be initiated. A multimodal approach was most effective for addressing pain.

Commentary

This article provided a thorough overview of anesthesia for chinchillas as well as general guidelines, diagnostic techniques, patient monitoring, and therapy for related medical conditions. Information on drug doses was presented. The principles of anesthesia described should be followed to ensure anesthetic risks are low and successful outcomes are achieved.—*Anthony Pilny, DVM, DABVP*

Source

Anaesthesia and analgesia in chinchillas. Saunders R, Harvey L. ***IN PRACT*** 34:34-43, 2012.

CONTINUES