The Approach to Pododermatitis in Dogs

Pododermatitis is a common and frequently debilitating inflammatory disease of the pedal skin. It can be part of more extensive skin disease but many patients have disease restricted to the feet. Clinical signs of pododermatitis include erythema, alopecia, oedema, hyperpigmentation, nodules, ulcers, haemorrhagic bullae and sinus tracts. There are many causes of pododermatitis, and they can be categorised into the groups of infectious/parasitic, allergic, endocrine, autoimmune/immune-mediated, acquired/traumatic, psychogenic/neurological, metabolic, genetic/inherited and neoplastic disease. The condition is complex and often multi-factorial, so it can be frustrating and difficult to manage; a methodical approach is therefore required.

Key words: Pododermatitis, canine, sterile pyogranuloma

Introduction
Pododermatitis is a common and frequently debilitating inflammatory disease of the pedal skin (White 1989). It can be part of more extensive skin disease but many patients have disease restricted to the feet. The condition is complex and often multi-factorial, so it can be frustrating and difficult to manage (Bajwa 2016); there are many possible causes, and they are often complicated by trauma, chronic changes and infection. In addition, many diseases produce similar cutaneous lesions on the feet so a thorough and methodical approach is needed (Duclos 2013).

Clinical signs
There is no age or sex predisposition for pododermatitis in dogs but some breeds appear to be predisposed. Some reports have suggested that Boxers, Bulldogs, Bull Terriers and German Short Haired Pointers are over-represented (Miller et al. 2013). Some long-coated dogs such as the German Shepherd, Golden Retriever and Irish Setter might also be more susceptible (Breathnach et al. 2008). The Pekingese, West Highland White Terrier, Scottish Terrier, Staffordshire Bull Terrier, Border Terrier and Boxer were over-represented in a study on interdigital cysts (Whitney 1970). Pododermatitis can involve the interdigital skin, the claws, claw folds and footpads. A discussion about diseases primarily affecting the claws is beyond the scope of this article so readers are referred to standard texts for more information (Miller et al. 2013). Clinical signs of pododermatitis include erythema, alopecia, oedema, hyperpigmentation, nodules, ulcers, haemorrhagic bullae and sinus tracts (Anderson 1980) (Figures 1 and 2). These lesions can be found on both the dorsal and palmar/plantar aspects of the feet (Breathnach et al. 2008). The footpads develop crusting, scaling, ulcers and fissures in some diseases (Figures 3 and 4). One or more feet can be affected. Lesions can be pruritic and/or painful, and when severe, this can lead to lameness and signs of lethargy and inappetence (Anderson 1980). Some cases can follow a waxing and waning pattern; others are more persistent, especially as they become more chronic.