ACUTE FEBRILE NEUTROPHILIC VASCULITIS AND NECROTIC DERMATITIS IN TWO SHAR PEI DOGS.

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The concept of Shar pei fever syndrome first appear in the veterinary literature in 1992, as a report of fever and lameness due to aseptic arthritis in a Shar pei dam and four of her puppies¹. Later a report of acute; widespread dermatopathy associated with fever and malaise in three young Shar pei was published². The later report did not indicate signs referable to the joins. The cutaneous lesions in the later report were characterized by haemorrhagic papules, macules or plaques affecting mainly the head and legs. The skin lesions were variable edematous and exudative, and progressed to necrosis and ulceration. Histopathological examination revealed neutrophilic dermatitis and vasculitis leading to ischemic necrosis of skin.²

This report presents the clinicopathologic features of two additional cases of acute febrile cutaneous vasculitis in Shar peis in Costa Rica, both of which also have swelling of the joint regions.

**Case 1:** It was a 4 month old, intact female, black Shar pei that was presented initially with high fever (40.5 °C), depression, and anorexia followed within 24 hours by swelling of the posterior left leg, also around the leg. On the third day the skin ulcerated and signs of suppurative dermatitis developed. The dog was then referred to Veterinary School, Universidad Nacional, Heredia. Examination revealed exudative, ulcerative lesions, particularly on the left side (thorax and base of ear. See the following pictures in different stages of evolution.

![Fig. 1. Third day after the onset of clinical signs.](image-url)
Case 2: It was a 4-year-old, intact female, brown Shar pei with a previous clinical history of two separated bouts of corticosteroid-responsive inflammation of two tarsal joints. The dog had developed swelling of the left elbow over the last 24 hours, and presented with fever (41°C) and severe facial inflammation, particularly of the muzzle. Hemorrhagic papules and macules were followed over the next 12 hours by ischemic necrosis of the skin, with sloughing and exudation.
Histopathology: In case one revealed severe ulceration and serocellular exudation. There was moderate neutrophilic dermatitis and vasculitis. See the following two pictures

Fig. 6. Diffuse dermal necrosis. The right picture showed a vasculitis.

In case two the epidermis showed necrosis, ulceration and crust formation. The dermis and deeper tissue including skeletal muscle were necrotic and edematous. A deep a necrotic band with detritus and polymorphonuclear cells was also observed. Blood vessels were necrotic and inflamed with neutrophils; intravascular thrombi were identified.

Fig. 7. A diffuse necrosis of the panniculus (panniculitis) is seen.
The clinical presentation and histopathological findings in these two Shar pei dogs are similar to the cases described in the literature as "acute febrile neutrophilic vasculitis of the skin". However, these dogs combine features of two previous reports of febrile disease in Shar peis, in that both cutaneous vasculitis as well as swelling of the joint regions occurred. It is noteworthy that this syndrome appears to affect young Shar pei dogs, as has been already published. This suggests a possible hereditary defect that increases susceptibility to immunologic vasculitis triggered by an as yet unknown antigenic event.


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