MANAGEMENT OF PROLIFERATIVE THROMBOVASCULAR NECROSIS OF PINNA IN A DOG

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A five year old Great Dane with lesion of the pinnal margin was presented for diagnosis and treatment. The animal was being treated locally with no improvement. Bilateral crusting and ulceration of the pinnal margins were observed. Based on a diagnosis of proliferative thrombovascular necrosis, the animal was treated with doxycycline, prednisolone and multivitamins with satisfactory improvement.

Keywords: Dog, Pinna,Thrombovascular necrosis.

Cutaneous vascular perfusion disorders are uncommon in dogs and when it occurs often affect the auricle and in many cases may be limited to the apex of the pinnae. Proliferative thrombovascular necrosis is one of such disorder involving only the pinnae. It is characterized by abnormalities in the blood flow which may occur as a result of vasculitis, trauma, thrombosis or degenerative changes. Pinnal margin vasculopathy or thrombovascular necrosis can be associated with a variety of inciting factors. It can be associated with vaccination or can be drug induced (Griffin, 2006). It is reported that clinical signs may occur within 2-4 month of administration of the biological agent or the drug. Fenbendazole associated vasculitis has also been reported (Nuttal *et al*., 2005).

Materials and Methods

A five year old female Great Dane dog was presented to University Veterinary Hospital, Kokkalai with the history of ear lesions. The owner reported that treatment was attempted locally with a veterinarian. Detailed history taking revealed that the lesions of the ear had not improved with the treatment. The animal was presently being treated with pentoxifylline.

On physical examination, the animal appeared active and alert with normal vital parameters. Examination of ear revealed a narrow wedge shaped lesions on both ear margins (Fig.1). Crusting and ulceration was noticed. A tentative diagnosis of thrombovascular necrosis of the pinna was reached based on the clinical signs. Complete blood count examination and examination of blood smear did not reveal any abnormality. There was no history of drug administration or vaccination prior to the development of clinical signs. The dog was treated with prednisolone @ 1mg/kg body weight and doxycycline @10mg/kg body weight per os q24h along with Multivitamins capsule (Thiamine Mononitrate 10 mg; Riboflavine 10 mg; Pyridoxine HCl 3 mg; Ascorbic acid coated eq to Ascorbic acid 150 mg; Nicotinamide 100 mg; Cyanocobalamin triturate in gelatin eq to Cyanocobalaim 15 mcg; Calcium Pantothenate 50 mg; Folic acid 1.5 mg; Biotin 100 mcg,) @ one capsule per os q8h. After two weeks it was reported that the condition had not worsened. The treatment was continued for another fourteen days with prednisolone and polybion capsule.

Results and discussion

On presenting the case after one month of initiation of treatment the condition had improved with no crust or bleeding from the lesions. However the wedge shape loss of continuity presented. The treatment was continued with reduction in dosing of prednisolone to 0.5mg/kg body weight per os q48h.Considerable improvement occurred with regard to the lesion by three months of treatment (Fig.2).

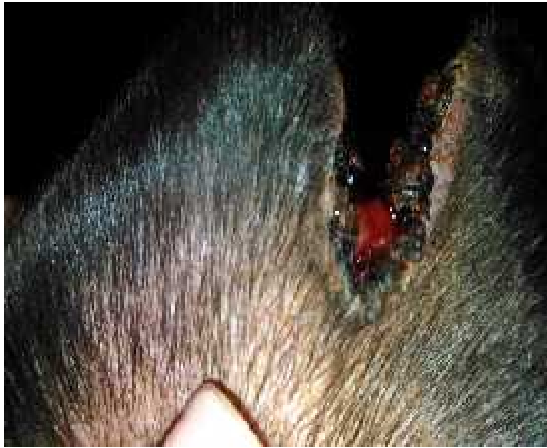

Fig 1. On the day of presentation

Fig 2. After three months of treatment

However, as in the present case in many cases, the etiology could not be ascertained and was classified as idiopathic. With lesions having a characteristic appearance and the practical difficulty in carrying out a biopsy of the affected area, diagnosis is based on clinical signs as also reported by Goodale (2018) as in the present case. Treatment was initiated with anti-inflammatory dose of prednisolone as the lesion was ulcerated and bleeding as also recommended by Morris (2013).

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