



AUTOIMMUNE CONNECTIVE TISSUE DISEASES

AUTOIMMUNE DISEASES OCURRING IN DOGS AND HUMANS: PATHS TO BE EXPLORED.

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BACKGROUND: Autoimmune diseases in humans are caused by exacerbated immune responses causing variable involvement of organs and tissues. They are also identified in animals, as the domestic dog (*Canis familiaris*). A clinical research was carried out looking for described autoimmune diseases in dogs with comparison with human diseases at clinical and histopathological levels.

OBSERVATIONS: We observed two cases of Lupus erythematosus, three of Pemphigus foliaceus and one of Scleroderma in plaque and Erythema multiforme in the period of one year. Lupus erythematosus occurs by a summation of genetic, hormonal and autoimmune factors. Histopathological examination are similar in dogs and humans. In dogs, the discoid lupus erythematosus shows depigmentation, erythema, exulcerations and crusts located mainly in the bridge and nasal plane. Pemphigus foliaceus in dogs presents superficial pustules and meliceric crusts, exulcerations, scales and alopecia, most commonly found in the bridge and nasal plane, around the eyes, in the auricles and may become generalized. The histopathology in humans and dogs is identical. Scleroderma in plaque or morphea presents sclerotic, depressed and atrophic plaques located predominantly in the trunk and proximal part of the limbs. Histopathological findings of dogs and humans also are similar. Erythema multiforme is a severe acute autoimmune disease of the skin and mucous membranes, associated with drugs, collagen diseases, infectious agents and food. Cutaneous lesions are usually characterized by erythematous macules, urticarial plaques, vesicles and blisters, target lesions and mucosal ulcers. The histopathological findings are very similar in dogs in humans.

KEY MESSAGES: The concomitance of autoimmune diseases in humans and dogs opens perspectives for the use of naturally occurring diseases as experimental models for diagnostic and therapeutic research. Advances in the control and prevention of these diseases in humans can also be used in dogs with better management and improvement in the veterinary care of autoimmune diseases.

