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## Autohaemotherapy for canine dermatitis

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**Abstract**

Atopic dermatitis is a common chronic relapsing pruritic skin disease of dogs for which treatment has varied over time. Acute cases were treated with a combination of medicated baths, glucocorticoids and antimicrobial therapy. In dogs with chronic disease, a combination of interventions should be considered with specific immunotherapy which offered an alternative therapeutic alternative to relieve the chronic disease when used with advanced corticosteroids and immunomodulators.

**Keywords:** autohaemotherapy, dermatitis, triamcinolone

**Introduction**

Canine atopic dermatitis is a common finding in veterinary practice, treating this chronic skin disorder is a challenge. Atopic dermatitis is typically triggered by exposure to allergens, such as pollen, dust etc. Allergen-specific immunotherapy or hyposensitization, is the only therapy for canine atopic dermatitis that may actually alter the natural course of the disease (Muller *et al.*, 2001) [1]. The Autohaemotherapy is the immediate intramuscular administration of freshly withdrawn autologous blood. It is a simplest process, in which there is no processing involved and no refrigeration or special equipment needed, except a sterile syringe and needle, and a tourniquet. Autohaemotherapy is a form of transfusion therapy that is far more common as an alternative medicinal modality. The main aim of Autohaemotherapy is to boost the immune system (Griffin and Hillier, 2001) [2]. When a small amount of blood is withdrawn from the animal and then injected back into the body leads to administration of everything that was in the blood remains, including antigen, antibodies, hormones, and minerals, any by-products from a disease process which stay in the blood. It is thought that by injecting the blood back into the body, the immune system is strengthened (Leug, 2001) [3]. The immune system recognizes the disease chemical markers in the blood and launches a fresh attack (Norman and Lichtenstein, 1978) [4].

Triamcinolone is a synthetic corticosteroid used to treat various skin conditions and to treat allergic conditions (Huge and Vale, 1965) [5]. It is about eight times as potent as prednisone. Intramuscular injection of triamcinolone may be indicated for the control of severe or incapacitating allergic states for which conventional treatments have failed, such as dermatitis and allergic conditions and drug hypersensitivity reactions. Triamcinolone is also used in veterinary medicine as an ingredient in topical ointments, also in topical sprays for control of pruritus in dogs and series of injections (Huge and Vale, 1965) [5].

**Material and Methods**

Twelve clinical cases of dog suffering from chronic dermatitis were treated for dermatitis with conventional treatment with parental administration of Phenramyn maleate @ 0.5 mg/ kg Body weight, Intramuscularly, Ivermectin @ 0.02 mg/ kg Body weight, subcutaneously at weekly interval with oral administration of cetirizine and commercially available hair coat tonic. After three weeks when the animal's donot responds for the treatment they are subjected with fixed regimen of autohaemotherapy:

Injection Triamcinolone 1ml total dose, intramuscularly, weekly for three weeks

Injection Autolouge blood 2ml, intramuscularly, weekly for three weeks

Injection milk iodine @ 1 ml/ 10 kg Body weight, Intramuscularly, every alternate day, five doses

**Result and Discussion**

After the first parental administration almost all the animals showed relief from the acute clinical signs of itching while the subsequent two more injections revealed very good response in the skin patches and hairs. After three week the therapeutic administration was stopped and all animals were reported with uneventful recovery. However two female dogs were again

Showed the recurrence of the clinical signs after two months of treatment. Both the females were then subjected for neuter surgery and they recovered after 9 months of ovariectomy.

Sousa and Norton (1990) [2] reported that many cases of dermatitis may not respond for the medicinal therapy however some cases may respond but the recurrence occurs after a short duration of interval as also observed in the present study. In such cases autohaemotherapy was tried and found to be a good alternate who gives better response in relieving the clinical signs of dermatitis (Valenta *et al.*, 1999) [7]. The beneficial effects of autohaemotherapy are due to its immune stimulatory effect. There is an increased production of both humoral and cell mediated immunity following autohaemotherapy (Syaama *et al.*, 2014) [8]. The Triamcinolone, a synthetic potent corticosteroid was also used along with the autohemotherapy to treat various skin conditions and allergic conditions (Steffan *et al.* 2006) [9].

The milk with iodine was administered from traditional knowledge, to boost up the immune system of the individual. While some times dermatitis may also seen because of hormonal disturbance (Barbet and Halliwell, 1989) [10] as also observed in the present study. Some of the chronic dermatitis cases were also reported due to some ingredients of the diets (Watson, 1998) [11].

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