



# Successful management of refractory cases of canine demodicosis with homeopathy medicine Graphitis

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**Abstract** Canine demodicosis is a refractory skin disease caused by excessive proliferation of mite *Demodex canis*. Despite availability of several treatment options, the disease poses a great challenge to clinicians for its long term management as some drugs may be ineffective or toxic. Present report describes successful treatment of two refractory cases of canine demodicosis using homeopathy medicine. After oral administration of Graphitis 200 C two drops once daily for 2 months, complete cure from the disease was observed. No adverse health effects of the medication were recorded during the treatment. Thus, it may be concluded that homeopathy medicine may be used safely for long-term management of canine demodicosis.

**Keywords** Canine · Demodicosis · Graphitis · Homeopathy · Mange

## Introduction

Canine demodicosis, commonly known as red mange is an ectoparasitic skin infection of dogs caused by excessive

proliferation of the microscopic cigar shaped mite, *Demodex canis* (Arthropoda: Archnida: Acari: Demodici-dae), in hair follicles and sebaceous glands (Gortel 2006). The disease is often associated with folliculitis and furunculosis due to secondary bacterial or mycotic infections and is refractory in nature (Tarallo et al. 2009). Several treatment options with variable responses including amitraz rinses, oral ivermectin, milbemycin, moxidectin etc. are available (Muller 2004). Topical amitraz therapy was the first drug approved for canine generalized demodicosis. However, it is not always effective or well tolerated by the patient (Paradis 1999). Use of macrocyclic lactones also has certain limitations because their prolonged use may be associated with adverse effects (Muller 2004). The present report describes successful management of refractory cases of canine demodicosis to allopathic acaricides with homeopathy medicine Graphitis 200 C.

## Case description

One 10 years old male Labrador dog, weighing around 23 kg was presented with more than 2 months old history of generalized hair loss and itching (Fig. 1). The deworming and vaccination were properly updated and the dog had otherwise no other problem. Skin scrapings was collected in 10 % potassium hydroxide and submitted for microscopic examination which revealed plenty of *Demodex canis* mites in different stages of development. Identification of mites was made by the method described by Urquhart (1996). Adult mites were cigar shaped with four pair of stubby legs in the thorax part of their body (Fig. 2). The case was diagnosed as generalized demodicosis and was treated with injection ivermectin @ 0.2 mg/kg body weight subcutaneously once weekly along with

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nutritional supplement (Syrup Nutriccoat, 2 tsf twice daily). The condition did not respond well even after 1 month of the treatment, hence it was decided to start the homeopathy medicine. Liquid Graphitis 200 C (Dr. William Schwabe India Pvt. Ltd., Noida, India) was advised to give 2 drops once daily for 1 month. The owner reported marked improvement in condition; hence it was continued for one more month. The dog was presented again after an interval of 15 days for general examination. Marked improvement in condition was noticed (Fig. 3) and it completely cured after 2 months of the therapy as evident from skin scrapings negative for mange mite.

Another dog (8 years old, male Dalmatian breed, body weight 20 kg) was presented with a month old history of itching, hair loss, and scar formation, which was more severe in paws, limbs and facial regions. The problem started more than 1 year back and was treated intermittently by several drugs which have shown partial improvement and the condition relapsed within few weeks after end of the medication. Skin scraping was found positive for *Demodex* mite. Again Liquid Graphitis 200 C was advised to be given (2 drops once daily) for 2 months. After 1 month of treatment, the improvement in condition was evident as erythematous area reduced in size, alopecic patches disappeared and the owner was quite satisfied with the progress of therapy. There were no frequent episodes of itching and irritation shown by the dog.

Both localized and generalized canine demodicosis are common in dogs (Aujla et al. 2000). In localized form, the mite grows in a limited area over the body to produce skin lesions. *Demodex* overgrowth is often associated with predisposing factors such as endoparasitism, poor nutrition, immunosuppression or transient stress (Gortel 2006). The presence of more than five localized lesions on the body, or when two or more feet affected by parasitic lesions, are indicative of generalized infection (Ghubash 2006). In generalized form of the disease, the growth of parasite is rampant to cover wider skin areas and more conspicuous



**Fig. 1** Labrador dog before treatment



**Fig. 2** Microphotograph of adult *Demodex canis* tiny, insect-like acarine with short, stubby legs ending in small blunt claws from the skin scraping (magnification  $\times 40$ )



**Fig. 3** Labrador dog one and a half month after treatment

changes in skin and hair coat. In present case, the Labrador dog had generalized demodicosis, while the Dalmatian had localized form of the disease. Both were quite old cases, where the disease relapsed after stopping treatment or change in weather condition. Cases of dogs treated by field veterinarians without improvement in their condition has been reported earlier (Sood et al. 2012). Treatment with Graphitis gave quite good response and no recurrence was reported even after stopping the drug administration. Homeopathic drugs by far are safer than other treatment options available for canine demodicosis. Amitraz may cause toxicity after its oral intake in sufficient concentration (Hugnet et al. 1996). Moreover, response of treatment is also variable (Paradis 1999). Oral ivermectins are also not safe as some dogs may show toxicity symptoms when oral ivermectin or related drugs are given for long time for treatment of demodicosis (Merola and Eubig 2012). Therefore, Graphitis seems to be a safe and useful alternative drug for treatment of canine demodicosis. Few reports published in the past also reported good efficacy of homeopathic drugs in the treatment of canine atopic dermatitis (Bettenay 1998; Scott et al. 2002; Hill et al. 2009). However, the efficacy of homeopathic

remedies in veterinary medicine is largely unproven and quite controversial, hence large-scale study is required to establish efficacy and safety profile of various homeopathy drugs in different breeds of canine.

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