

## STUDY ON THE EFFECTIVENESS OF CERTAIN SUBSTANCES WITH EXTERNAL APPLICATION IN THE TREATMENT OF CANINE DEMODICOSIS

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### **Abstract**

*Demodicosis is a parasitosis produced by Demodex canis at dogs and Demodex cati at cats(2,3). The parasites are situated in the pilose follicles and sebaceous glands, being well protected from the external factors. Their multiplication is made easier because of the hypersecretion of sebum produced by the passive defense(1,3). Seeing the recesses and failures of my veterinarian colleagues regarding demodicosis therapy, I consider convenient the research regarding the use of two ways of treating this parasitosis both at dogs.*

**Key words:** dog, demodicosis, external application.

### **INTRODUCTION**

Canine demodicosis is a common dermatosis caused by parasitic noncontagious different spp of Demodex mites including Demodex canis, Demodex injai and D. cornei. Generalized demodicosis can be one of the most frustrating skin diseases, one will ever treat. Conventional and newer miticidal therapies are available to the veterinarian to treat this frustrating skin disease. All recognized Demodex mites in dogs appear to respond similarly to mite targeted therapy. Treatment for canine demodicosis includes amitraz, ivermectin, moxidectin, milbemicin oxime, and doramectin (12).

In this paper we used external application products: Taktic (amitraz), Advocate (moxidectin & imidacloprid).

### **MATERIALS AND METHODS**

Research has been carried out at three medical offices of Bihor County.

Arrangements have been made in the study, the total number of medical cards only those containing the diagnosis of canine demodocic: a total of 169 cases.

The diagnosis was made clear by the epizootological examination, clinical and microscopic examinations carried out in skin raclats. Cards have been drawn up for a period of two and a half years (June 2009-December 2011).

Each card contains medical data relating to owner (name, address) and patient-related data (race, age, sex, identification, diagnosis, clinical observations, the epizootiological, laboratory testing, treatments, scores).

Of the 169 cases in this paper we chose 40 dogs, containing a massive demodex (the area affected was greater than 100 cm<sup>2</sup>) with different severity. These dogs during treatment (experimental) have not received treatment other immunosuppressive medications or ectoparasiticide.

Therapeutic preparations used for treatment of 40 patients with generalized demodex were:

- Tactic-is a local topic, in the form of a solution, active substance: „amitraz”.
- Advocate is a preparation in liquid form, with spot-on type use, having as active substance „imidacloprid and moxidectin”.

Have formed two groups. Each group taken in the study include animals with the same form of clinical evolution of demodex (General demodex) but belonging to different races and different ages.

The first group is made up of twenty dogs between the ages of six months and two years (6 months-2 years). The breeds are represented by the American Staffordshire Terrier, Boxer, german Shepherd Dog, Pug, Pinscher dwarf, Shih-Tzu and common races. This group has been administered Tactic (Amitraz) soil 12.5, 2 ml/1 l of water every 7 days.

The second group is made up of twenty dogs between the ages of six months and two years (6 months-2 years). The breeds are represented by the American Staffordshire Terrier, English Bulldog, Chihuahua, Pug, Rottweiler, Yorkshire terrier and breed. This group has been administered to Advocate spot-on. (according to table no.), once every 7 days (according to the manufacturer's recommendation).

*Table 1.*

Dosing of Advocate\_ (10% imidacloprid and 2.5% moxidectin) administered during the study

Weight of the dog (kg)	Advocate (ml)	Imidacloprid (mg)	Moxidectin (mg)
1 – 4	0.4	40	10
4 – 10	1.0	100	25
10 – 25	2.5	250	62.5
25 – 40	4.0	400	100
40 – 65	6.5	650	162.5

Throughout the duration of the study patients were kept under clinical and microscopic observation (cutaneous raclat every two weeks after clinical recovery every week).

Their healing both clinically and parasitological had been watched. In most cases preceded the clinical recovery on the parasitological.

Treatment was discontinued after getting two sets of negative skin scraped.

For each patient, of course, was established also antibioterapie (Amoxicillin 15).

## **RESULTS AND DISCUSSIONS**

When:

First clinical groups: healing in 5-6 weeks, parazitological in 6-9 weeks after the onset of treatment. Side effects: there have been none recorded. No relapse so far.

Group two: of the 20 patients 17 (85) were clinically cured within 6 to 12 weeks, and parazitological in 10 to 15 weeks. Three dogs (15) have shown signs of improvement after four months of treatment. Side effects: No. A single relapse.

Both preparations we obtained good therapeutic results. Concerning the period of healing both the clinical and parazitological it can be observed a favor for product Tactic.

## **CONCLUSIONS**

Taking into account the results obtained both recommend therapeutic solutions in the generalized demodicozei therapy. Preparation Advocate is easy to manage and has the advantage of an elegant way of treatment.

From a financial standpoint more convinient choice is the treatment with Tactic (Amitraz) which is available at an affordable price in the market. The results obtained are consistent with other studies specialist (7,8,9,10).

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