

THE DOG'S MAIN ECTOPARASITES IN THE CENTRAL REGIONS OF ALGERIA

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Abstract. *The whole research is a descriptive study on the ectoparasitic that is conducted by using dogs in the central regions (Algiers, Blida). By following the interview of 25 veterinary practitioners, we found that the breed of "German Shepherd dog" is predominant and the most common ectoparasitic are scabs, tick-borne diseases and pulicose. The ectoparasitic represents half for the reasons for medical consultation and 65% of dermatological conditions. Finally, the vermectins and organophosphate pesticides are commonly used as preventive and curative purposes.*

Keywords: Algiers, Blida, ectoparasitic, German Shepherd, Skin Disorders, Epidemiology, Avermectins.

INTRODUCTION

Dermatology parasite occupies an important place in everyday practice of canine medicine. Additional tests are often simple and quick to make it possible to find the parasites that cause these skin problems. Their identification is essential for the clinician in order to establish a prognosis, an appropriate drug treatment and consider a plan of prevention to the level of the individual or even within communities.

It was also observed that the owners are more and more attentive to the health of their faithful companions (dogs) are increasingly demanding exams, accurate diagnosis and appropriate treatment. Their demands are amplified when the dog suffers from chronic skin diseases which respond little or not at all to various treatments, and has frequent relapses (Saker, in Bayon, 2008). It is important to add that the zoonotic potential of certain parasitic skin diseases is also essential to consider. This is the special case of leishmaniasis, which remains endemic in Algeria. In addition to the impact on health, skin parasites are important not only from a medical point of view but also from an economic standpoint, when we know the value of certain dog breeds in our country!

Small Animal Dermatology is a chapter of veterinary medicine at once exciting and rapidly developing. During the last decade, many new diseases and new diagnostic methods have been discovered and patho physiology of many skin diseases has been elucidated (Carlotti, 2002). The aim of our study is to conduct a retrospective survey on cases of canine dermatoses to determine the prevalence of ectoparasites in dogs according to season, geographic region, and the hygiene.

MATERIAL AND METHOD

Several municipalities in the departments of Blida and Algiers have been involved in our investigation. To get a form involving several issues relating to the

etiology, epidemiology, clinic, means of diagnosis and control methods implemented by each veterinarian, has been developed. In this context, 25 veterinary practitioners were visited during our investigation that has lasted from January to April 2010.

RESULTS AND DISCUSSION

The number of cases of dogs surveyed (Table 1) in Algiers and Blida, respectively is 10 (40%) and 15 (60%). The canine species is the most popular, (64%). While remaining very low (Table 2), it appears clearly that it is during the spring that the number of canine consultation increases with a peak during April (40% of all visits). The ectoparasitic represent half of the reasons for consultation (Table 3). Practically, 2 / 3 of the reasons for dermatologic consultation are of parasitic origin (Table 4).

Table 1

Number of cases according to the regions

	Algiers	Blida
Number	10	15
Rate	40%	60%

Table 2

Numbers according to the months

	January	Féb	March	April	May
Number of cases	4	3	4	11	3

Table 3

Motives of consultation during the parasitosis

	Ectoparasitoses	Other motives
Rate (%)	49%	51%

Table 4

Ectoparasitosis according to cases of dermatology

Dermatosis	Parasitic	Others
Rate (%)	65%	35%

The seasonal influence (Table 5) is very significant for external parasites: it is very high in summer for ticks (96%), scabies (92%) and lice (60%), and spring chips (80%) and autumn-winter moths. Over 90% of cases of ectoparasitic, are associated with endoparasitose. Hygiene and season are constant factors, promoting the development of ectoparasitic. Other factors such as region, type, age and the food is strictly limited to lesser degrees (48%, 24%, 12% and 4%). According to veterinary practitioners the choice of antiparasitic molecules (Sch. 6) is guided by the target pests (92%) and the degree of risk (56%). The most common presentations (Tabl. 7) are in the form of collars (96%), bathing solution (80%), and injection (76%). Finally, the avermectins and organophosphates are the treatments of choice for external deworming dogs (Tabl. 8).

Table 5

Proportion of ectoparasitosis according to seasons

	Summer	Autumn	Winter	Spring
Scabies	92%	56%	48%	84%
Ticks	96%	24%	0%	88%
Pulicose	68%	32%	12%	80%
Phtiriose	60%	40%	24%	40%
Ringworm	44%	52%	52%	32%

Table 6

Factors influencing the choice of pest control

	Targeted pest	shape	Risk	Age	Species
Rate (%)	92%	36%	56%	32%	44%

Table 7

Presentation of pesticides used

Form	Shampoo	Necklace	Bath	Tablet	Spray	Pipette	Inj.
Pourcentage (%)	72%	96%	80%	56%	44%	8%	76%

Table 8

Proportion of specialty pesticides used

Speciality	Rate (%)
Frontalin	24%
Carbamates	12%
Ivermectin	76%
Pyréthroïdes	4%
Organo Chlorinated	28%
Organo-phosphorate	56%

Table 9

Frequency of ectoparasitic based on race

Race	German shepherd dog	Others
Number of cases	16	9
Fréquency (%)	64%	36%

The questionnaire results we can conclude that the ectoparasitic are more common than other skin disorders (65%). This can be explained by the fact that dogs are sensitive to environmental conditions and particularly the conditions of hygiene.

Customer canine represents nearly half (49%) of all clients of veterinary practitioners in these two major cities in central Algeria. In order of decreasing importance, are the ticks that are the primary threat to the dog (40%) and scabies mites' agents (32%) and fleas (28%). Lice and dermatophytes are rare. This is due, according to veterinary practitioners, season and poor hygiene (100%) and area (48%). The seasonal influence is very significant for external parasites: it is very high in summer for ticks (96%), scabies (92%) and lice (60%), and spring for the chips (80%), and autumn-winter moths.

According to veterinary practitioners, the choice of anti-parasitic molecules is based not only on the target pests (92%) but also on the degree of risk (56%). The presentations are the most common form of collars (96%), bathing solution (80%), and injection (76%). Finally, the avermectins and organophosphates are the treatments of choice for de-worming dogs outside.

CONCLUSIONS

The survey in the central regions of Algeria (Algiers, Blida &), we found that the canine is most frequently represented by the German Shepherd dog. Customer canine is not negligible when compared with other veterinary activities. There is a predominance of external parasites from other skin disorders. Poor hygiene is the most important risk factor in the proliferation of ectoparasites. There is no relationship between age and the development of ectoparasites, the animal can be noisy at any age. Veterinary practitioners never use the diagnostic laboratory to detect ectoparasites. The mites and ticks are the most common arthropod. The seasons play an important role in the development of ectoparasitic. Galls, dermatitis and tick the phtirioses are more frequent in summer. In contrast, pulicose is more common in spring, and ringworm is more common in winter and autumn. The association of ectoparasites is not uncommon. The choice of antiparasitic molecules depends on the target pest and the degree of risk. Shampoos, collars and baths are the most common presentations. The avermectins are the first line drugs at ectoparasitic. Hygiene and clinical screening are the main preventive measures used to fight against ectoparasites. The cure rate often exceeds 80% after full treatment.

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