Parasitosis of stray dogs in north-eastern Spain

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Summary: The authors analysed 42 stray dogs in north-eastern Spain. Of these, 29 dogs were parasitised by one or more helminth species. The parasites found were intestinal nematodes (59.52%) and cestodes (47.61%). Differences between urban stray dogs and feral dogs are discussed.

KEYWORDS: Parasitosis – Spain – Stray dogs.

INTRODUCTION

This study concerns the helminth community in stray dogs in Aragon (north-eastern Spain). The aim was to discover the prevalence of cestodes and nematodes in two different dog populations: urban stray dogs and rural feral dogs.

MATERIALS AND METHODS

Autopsies were conducted on 42 dogs: 26 feral dogs (non-domesticated dogs living in the country) and 16 urban stray dogs (wild dogs living in or near a city, in this case Saragossa). The rural dogs were obtained by hunting, while the urban dogs were obtained from the municipal kennels of Saragossa.

This research forms part of a wider project, the aim of which is to study the number, feeding, age structure, etc. of stray dogs in Aragon (3).

The identification of the parasites was performed by the usual helminthological methods (5).

RESULTS AND DISCUSSION

The results of this study are presented in Table I.

The level of parasite infestation in the dogs studied (69.04%) is similar to the levels reported by similar research studies carried out elsewhere in Spain: Ares and colleagues
Incidence of parasites in urban and stray dogs in Aragon, north-eastern Spain

<table>
<thead>
<tr>
<th>Species</th>
<th>Urban stray dogs</th>
<th>Feral dogs</th>
<th>All dogs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Dogs examined</td>
<td>16</td>
<td>100.00</td>
<td>26</td>
</tr>
<tr>
<td>Dogs infested by parasites</td>
<td>9</td>
<td>56.25</td>
<td>20</td>
</tr>
</tbody>
</table>

Nematodes

- *Dirofilaria immitis* 2 12.50 7 26.92 9 21.42
- *Toxocara canis* 1 6.25 3 11.53 4 9.52
- *Toxascaris leonina* 3 18.75 3 11.53 6 14.28
- *Ascaridia spp.* 1 6.25 1 3.84 2 4.76
- *Trichuris vulpis* 2 12.50 2 7.69 4 9.52
- *Uncinaria stenocephala* 1 6.25 10 38.46 11 26.19
- *Ancylostoma spp.* 1 6.25 3 11.53 4 9.52

Total carrying nematodes* 8 50.00 17 65.38 25 59.52

Eucestoda

- *Taenia hydatigena* 2 12.50 8 30.76 10 23.80
- *Taenia multiceps* 1 6.25 1 3.84 2 4.76
- *Taenia pisiformis* – – 1 3.84 1 2.38
- *Taenia spp.* 2 12.50 10 38.46 12 28.57
- *Echinococcus granulosus* 1 6.25 – – 1 2.38
- *Dipylidium caninum* 6 37.50 11 42.31 17 40.47
- *Mesocestoides spp.* 1 6.25 1 3.84 2 4.76

Total carrying eucestoda* 5 31.25 15 57.69 20 47.61

* Dogs may be infested by several species of parasite

found 52.4% in Galicia (1); Illiescas and colleagues 70.97% in Granada (4), and Valladares and colleagues 52.2% in Tenerife (6).

The proportion of dogs carrying parasites is greater in the feral dog population (76.92%) than in urban strays (56.25%), particularly by cestodes of the Taenidae family. This indicates that carrion of livestock and hunted game are more important in the diet of feral dogs than for urban stray dogs. Rubbish dumps are the main source of food for the latter.

Echinococcosis is the most important parasitic zoonosis in the region, with a prevalence of 73.69% in ovine livestock and 10.6 per 100,000 human inhabitants in Aragon (2). Only one case of echinococcosis was found in this study, with low infestation (only two worms). The number of dogs used in the study is too small to enable an evaluation of the importance of dogs in the transmission of this disease to humans and cattle.
PARASITOSES DES CHIENS ERRANTS DANS LE NORD-EST DE L'ESPAGNE. -
A. Arriolabengoa Igarza, J. Lucientes Curdi, C. Gortazar Schmidt et C. Calvete Margolies.

Résumé : Sur 42 chiens errants examinés dans le nord-est de l'Espagne, 29 étaient porteurs d'une ou plusieurs espèces d'helminthes. Les parasites identifiés étaient des nématodes (59,52 %) et des cestodes (47,61 %) intestinaux. Les auteurs discutent des différences entre les chiens errants des villes et les chiens sauvages.

MOTS-CLÉS : Chiens errants – Espagne – Parasitoses.

PARASITOSIS DE LOS PERROS VAGABUNDOS EN EL NORESTE DE ESPAÑA. -
A. Arriolabengoa Igarza, J. Lucientes Curdi, C. Gortazar Schmidt y C. Calvete Margolles.

Resumen: De 42 perros vagabundos estudiados en el noreste de España, 29 eran portadores de una o varias especies de helmintos. Los parásitos observados eran nematodos (59,52%) y cestodos (47,61%) intestinales. Los autores analizan después las diferencias entre perros vagabundos urbanos y perros salvajes.

PALABRAS CLAVE: España – Parasitosis – Perros vagabundos.

REFERENCES