Therapeutic and lesional aspects of feline infectious peritonitis

Aspecte terapeutice și lezionale în peritonita infecțioasă felină

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Abstract

The prevalence of feline infectious peritonitis (FIP) can not be assessed on the basis of serological surveys because positive serological reagents rate does not correlate with disease rates. In units with more cats and numerous movements (input - output), the proportion of positive serological reagents is very high, and could reach, in some countries or regions at 50-75-100%, while among cats scattered near homes reactants rate positive to VPIF is well below 50%. Research conducted aimed at treating and determining evolutionary form of FIP based on pathological lesions in cats dead

Rezumat

Prevalența peritonitei infecțioase feline (PIF) nu poate fi apreciată pe baza unor anchete serologice, deoarece rata reactanților pozitivi serologic nu se corelează cu rata îmbolnăvirilor. În crescătoriile cu multe pisici sau multe mișcări (intrări - ieșiri), proporția reactanților pozitivi serologic este foarte mare, putând ajunge, in unele țări sau regiuni la 50-75-100%, în timp ce printre pisicile dispersate pe lângă casele oamenilor rata reactanților pozitivi față de VPIF este mult sub 50%. Cercetările efectuate au avut ca scop tratarea și stabilirea formei evolutive a peritonitei infecțioase feline pe baza leziunilor morfopatologice în cazul pisicilor decesate.

Introduction

For feline infectious peritonitis (FIP) receptive are all cats, domestic and wild, large and small, but the disease is most commonly seen in domestic cat.

The receptors are young cats between 6 months and 2 years (with a peak incidence at 9-10 months) and those of improved breeds, regardless of gender.

Highest prevalence recorded in local disease of cats, especially in organized farms where inputs and outputs are permanently cats (pensions, specialized farms etc).

Aim of study

The researchers conducted aimed at treating and determining evolutionary form of FIP based on morphopathological lesions in the dead cat cases (2, 3, 5, 6, 7, 13, 16).

1. Materials and methods

The research was conducted during October 2010 - December 2010 on 5 cats, from animal protection association AniMed Arad. The suspicion for suspected feline infectious peritonitis occurred in clinical examination of cats when he noticed abdominal distension, which has seen the wave feel to the touch.

Since they have collected blood samples were dosed veto FIP test which showed in addition to the control line a second line which shows that test is positive (Figure 1).

Veto-test PIP Ab

Veto test is designed to detect antibodies against the virus commissioning of whole blood, serum or plasma (1, 8, 9).
After being absorbed in cellulose pad, antibodies bind to a complex colloidal FIPV N protein antigen conjugate pad forming Ag-Ac complex. This complex forms the complex Ag-Ac-Ag sandwich direct antigen binding protein of FIP in membranal N nitrocellulose. Test result may occur as C (control) and T (test) form lines if test uses immuno chromatography principles.

Figure 1. Positive FIP veto - test

Once confirmed the diagnosis, although the literature states that there is no effective therapeutic conduct in this disease, the cats have undergone a specific treatment that aimed immune system and fight secondary infections. It was made after a sketch in Table1.

2. Results and Discussion

However, after a transient improvement status , the end was fatal in all cases within 9 days after onset of illness.

Their bodies being necropsy through specific mammals technique.

At necropsy was showed a swelling of serous effusion, first the pleura and peritoneum.

In the serous cavity was observed accumulation of light-gray exudates, viscous fluid.

On the pleura and peritoneum surface were observed numerous necrotic foci measuring up to 3 mm. (4, 10, 11, 12).

Due to abundant exudates which lines the serous, occurred adhesions between the liver, diaphragm and bowel chances. (Fig. 2, 3, 4, 5)

The researches on the 5 corpses are shown schematically both tabular form and graphical form (Table2, Fig. 7).

Table 1

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Alamycin (tetraciclinc)</th>
<th>Depedine (prednisone+dexametasone)</th>
<th>Vitamin C</th>
<th>Glucose 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.3 ml –3 days</td>
<td>0.3 ml – first day</td>
<td>1 ml–5 Days</td>
<td>250 ml The day I and IV booster on</td>
</tr>
<tr>
<td>2</td>
<td>300 ml The day I and IV booster on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>250 ml The day I and IV booster on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>250 ml The day I and IV booster on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>300 ml The day I and IV booster on</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Viscous fluid in the abdominal skin detachment (PIF)

Figure 3. Serohemoragic exudate opening the abdominal cavity (PIF)
Figure 4. Serohemoragic exudate opening the thoracic cavity (PIF)

Figure 5. Adhesions between the liver, diaphragm and bowel chances (PIF)

Figure 6. Adhesions between the liver and diaphragm serous necrosis (PIF)

Table 2. The picture lesion and test results FIP

<table>
<thead>
<tr>
<th>Nr. crt</th>
<th>Presentation</th>
<th>Location exudate</th>
<th>Location adhesions</th>
<th>Location foci of necrosis</th>
<th>Vetotest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Effusion form</td>
<td>Thoracic and abdominal cavity</td>
<td>Hepato-diaphragmatic and intestinal</td>
<td>Pleura and peritoneum</td>
<td>+</td>
</tr>
<tr>
<td>2</td>
<td>Effusion form</td>
<td>Thoracic and abdominal cavity</td>
<td>Hepato-diaphragmatic and intestinal</td>
<td>Pleura and peritoneum</td>
<td>+</td>
</tr>
<tr>
<td>3</td>
<td>Effusion form</td>
<td>Thoracic and abdominal cavity</td>
<td>Hepato-diaphragmatic and intestinal</td>
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<td>+</td>
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<tr>
<td>5</td>
<td>Effusion form</td>
<td>Thoracic and abdominal cavity</td>
<td>Hepato-diaphragmatic adhesions</td>
<td>Pleura</td>
<td>+</td>
</tr>
</tbody>
</table>
Discussion

With all the treatment attempts none of the 5 cases was saved. As the literature indicates, the highest sensitivity to the disease has cats from organized farms where there is constant movement effectively (14, 15, 17).

In this case the cats came from an association for the animal protection.

Because the specific prophylaxis was not put up until now, the only measure of disease remains avoidance avoid as much as possible crowded areas cats.

Conclusions

- In all 5 cases with FIP test was positive.
- Treatment feline infectious peritonitis did not work, fatal disease in all cases.
- Perform necropsy revealed pleural lesions form.
- In all 5 cases found the presence of exudate in the abdominal cavity and the chest cavity.
- Hepatodiaphragmatic adhesions were present in all 5 cadavers, and the gut in three of the five bodies.
- The presence of foci of necrosis has been reported in the pleura in all 5 cadavers and the peritoneum only 3 bodies.

Bibliography

29. ***http://www.draddie.com/WhatsFIP.htm#WhatsFIP; (accesat februarie 2011),