RESEARCHES CONCERNING SOME CLINICAL AND PARACLINICAL ASPECTS OF CHOLECYSTOPATHIES IN DOGS

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Summary

In this paper work are presented the results of clinical and paraclinical exams in some gall bladder disordes in dogs.

These disordes appeared in low frecvency (1-2%), but some aspects of gastric intolerance, colic and low hepatic insuficience can be explained through paraclinical exam.

We have investigated three dogs, different age and breed, with dyspeptic sindrome: emesis, colic, ichterus, anorexy.

Biochemical and haematological exams were performed in these dogs. To esthablish the presicions diagnostic ecography was used as common method.

Key words: dog, ecography, lever, icterus.

The gall bladder in dogs is an ovoid reservoir, located on the visceral liver area, within the gall bladder fossa, between the square and right lobe. It has the role of storing, concentrating and releasing the bile between digestion periods. Its functions are not rigorously indispensable; that is why its ablation does not affect normal liver functioning.

Cholecystopathies represents the affections of gall bladder and bile ducts; they can be functional, inflammatory or obstructive (calculi, tumors, abscesses, hematoms).

Colelites are consisted of bile pigments, bile salts, cholesterol, organic salts etc., causing colic, icterus, billiary stases and the break of the gall bladder, all these being followed by a deadly coleperitoneum (1, 2).

During the last period, there have been, in our faculty, preoccupations related to this topic, and with this paper work we have intended to supervise the investigation of various clinical and paraclinical aspects determined by cholecyst affections in dogs.

Materials and methods

Our study has been carried out at the department of Medical Pathology, on 3 different-breed dogs, with age between 8 and 12 years, presenting various dyspeptic symptoms associated to colic of different intensities. We have also implied within this work a private cabinet and the laboratory Bioclinica.

At the clinician's recommendation, these cases were investigated from a clinical and paraclinical point of view, as well (biochemical sanguine and

echographic), in order to determine the diagnosis and to establish the therapeutic measures.

The clinical examination was performed with the help of general semiological methods.

Biochemically, in blood we have determined bilirubin (total and direct), GOT, GPT, GGT and the alkaline phosphatase (5).

In order to establish the diagnosis with certainty, we have applied the echographic method using a device Pie Medical 1 Scanner 100 S, endowed with a sectorial style of 5 – 7.5 MHz.

Results and discussion

In the cases clinically examined, we have noticed the presence of some dyspeptic syndromes, characterized by periodic vomiting, especially post-prandial, alternations between constipation and diarrhea, slight anemia or a sub-icteric state (pale or white-yellow mucous), bleached or black faeces, with a bad smell, flatulence, distension. During the periods of re-acutization, our cases have presented shivering, sub-feverishness, somnolence, hyper sensibility to palpation under the right rib reboard.

The pain at the cholecyst level have irradiated in many situations into the lumbar region, being able to give diagnostic errors in cases of improper handling.

Another criteria which may orient us towards a certain diagnosis (in the case of cholecystopathies) is represented by the fact that the disorders mentioned above install successive to the consumption of excessive food quantities, or the food was too fat, or as a result of stress.

The first case was represented by a 12 year old half-bred female, with a dyspeptic clinical symptomatology expressed through vomiting, sub-icterus, disorezia, sub-feverishness, and somnolence.

We have taken blood samples and examined them hematological and biochemical. Hematological, we have noticed a neutrophilic-type leukocytes (18.7 thousand/mm^3 blood and 86% neutrophils, compared to 10 thousand/mm^3 normal blood, respectively 50-70% neutrophils).

Biochemical, we have recorded the following values:

- GOT (ASAT): 125 UI (normal values 55-100 UI);
- GPT (ALAT): 115 UI (normal values 21-102 UI);
- GGT: 6.8 UI (normal values 0-6.4 UI);
- PA (alkaline phosphatase): 120 UI (normal values < 100 UI);
- total bilirubin: 0.5 mg/dl (normal values 0.1 mg/dl).

At the ecographic examination, we have noticed a homogenous hepatic eco-structure, with rare hyper-ecogen areas which may be the consequence of some lesions of hepatic steatosis. The colecyst have normal dimensions, the walls are slightly thickened, and there is a non-organized sediment in the interior, confirming the diagnose of chronic cholecystistis with billiary sludge.

The second case examined was a 10 year old Doberman dog, a female. It has presented a vague symptomatology of small hepatic insufficiency, sometimes associated to dyspeptic episodes. At medical recommendation, we have performed a biochemical sanguine examination, observing an increase of the trans-aminase activity (ASAT, ALAT), of the alkaline phosphatase and a total bilirubin value of 0.20 mg/dl (compared to 0.10 mg/dl normally).

At the echographical examination, the hepatic structure had a normal aspect, with a parietal thickening of the cholecyst and the presence of a non-homogenous sediment. The diagnosis was of chronic cholecystitits with billiary sludge.

The third case was represented by a half-breed male dog, 8 years old. This one presented: passenger alimentary intolerance, colic, the preference for cold places, and high sensibility in the right hypochondria.

Para clinically, we have obtained increased values of all parameters investigated: ALAT 170 UI; ASAT 183 UI; GGT 8.5 UI; PA 173 UI; total bilirubin 0.8 mg/dl.

The abdominal echographic examination has made evident a liver with a hyper-ecogen structure, cholecyst with normal dimensions and shape, but a thickened cholecyst wall and the presence of a sediment.

The diagnose was of chronic cholecystitis with sedimentosis and incipient hepatic steatosis.

In order to treat such cholecystopathies, we have recommended an alimentary diet (vegetable soups, standard food diets, light fat-free meat, diet dairy products, etc.), and as medicaments we have used antispastic, choleretic, colagog and hepatoprotective products (3, 4).

Conclusions

- The clinical examination, completed by the para clinical and echographical ones, has helped the clinician in establishing the right diagnose in different hepatic-billiary affections in dog.
- The hepatic-billiary diseases represent, in many cases, the major cause for dyspeptic syndromes, on the general background provided by bad nutritional behavior.
- The “masked” symptomatology, result of obscure hepatic-billiar lesions, needs supplementary investigations in order to set the right diagnose.

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