

UNDER THE WEATHER

No Tok, Just Tick

Chico wasn't his usual happy self when he came to the clinic. No happy face, no effusive tail wagging, no straining at the leash to meet me. What happened? I asked his guardian. He's been very depressed and feverish, she said. I took his temperature, and sure enough, it was very high. My assistants then swung into action. One took his blood for tests, the other started him on IV fluids. The snap test showed two blue dots. He was positive for Ehrlichiosis. When I told the guardian, she was shocked. But he doesn't have ticks, she said. I check him daily and remove any as soon as I find them. That's just it, I said. He doesn't have to be infested with ticks, just one infected tick is enough to spread the disease. These diseases flourish in our tropical weather, so you get a whole spectrum of tick-transmitted diseases.



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According to Dr Mukulesh Gatne, Professor of Parasitology, the three most common tick borne infections in India are Ehrlichia, Babesia and Hepatozoon canis. Another organism called anaplasma is thought to be prevalent, but is a matter of debate currently.

So what exactly are tick borne diseases? These are diseases where the organism uses ticks as a vector for spreading disease.

An infected tick falls off a sick animal, climbs on to another and spreads the disease through a bite. Symptoms of tick borne diseases are varied and include any of the following: lack of appetite, weight loss, fever, lethargy, vomiting or diarrhoea, haemorrhaging (under skin, through nose, through stool or urine), lameness in one or more legs, pale gums or tongue. Sometimes the symptoms are subtle and may go undetected in the chronic stage of the disease. The vet may find the liver or spleen enlarged on physical examination, the lymph nodes may be enlarged and there may be retinal haemorrhages.

Since there are multiple tick borne diseases, it is important to do the correct diagnostic tests to identify the specific organism, since treatment may differ. There are snap tests available which help to identify two of the prevalent diseases, and results are seen immediately. Blood smears and other blood counts may also help in differentiating and treating the diseases. The blood picture may show a drop in platelet count, low WBC or RBC count (Ehrlichia), elevated WBC and neutrophil count (Babesia), or elevated liver enzymes (Hepatozoon).

Broadly, these diseases manifest in three stages – acute, subacute and chronic. In the acute phase, the dog may show any of the above symptoms, including fever. If not detected or treated, some dogs may move on to the subacute phase, where the organism may live in the pet's body for months or years without overpowering the immune systems and without the pet showing clinical symptoms. This can then flare up in times of stress, which is called the chronic phase. This stage is more difficult to treat, since the organisms can be sequestered in the spleen, bone marrow or liver. The pet's ability to make antibodies against the disease is also impaired at this stage, and they might be resistant to treatment. Early diagnosis and treatment helps to eliminate the disease before it moves to the next stage.



A daily check for ticks and a weekly or monthly program for tick control should be followed religiously

Tick fever can also mimic a host of other diseases, since the symptoms are so varied, but your vet will be able to differentiate it by a thorough physical exam coupled with blood tests. The following would constitute a good screen for tick-transmitted infections:

- Complete blood count
- Snap test or titer test for Ehrlichia canis
- Snap test for Anaplasma (Ehrlichia equi)
- Blood smear
- SGPT and creatinine

Once tick fever is confirmed, your vet will prescribe Doxycycline for three to six weeks or longer, depending on the stage of the disease. Doxycycline should not be given along with calcium, iron or magnesium supplements (like calcium tablets or antacids), since these will hamper absorption (unless the dog has anaemia, in which case iron is necessary). An injection called Imidocarb is given for Babesia and resistant cases of Ehrlichia. Its success rate is 95 to 98%, but it does have potential side effects like irritation at the injection site, nausea, vomiting, excessive drooling, salivation or muscle tremors. It could also cause kidney damage to dehydrated dogs.

As they say, prevention is better than cure, so have a regular programme of tick and flea control. A daily check for ticks, followed by a weekly or monthly programme for tick control should be followed religiously to prevent the deadly tick-transmitted diseases.

