



## Case Report

### Ehrlichiosis in a German shepherd; a Case Report

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#### ABSTRACT

A 2 year old German Shepherd dog suffering from Ehrlichiosis was presented at Referral Veterinary Poly clinic at Indian Veterinary Research Institute. It was diagnosed with Ehrlichiosis on clinical and laboratory examination. Treatment was started with doxycycline, paracetamol, metaclopramide and revici. Animal showed good improvement in two weeks.

**Key Words:** German shepherd, Ehrlichiosis, Doxycycline

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Ehrlichiosis is characterized by fever, hemorrhages, bleeding; petechial hemorrhages sub cutaneously, anaemia, vomiting and diarrhoea (Greene, 1998). It is caused by a rickettsia, *Ehrlichia canis* (E. canis), which is a small pleomorphic gram-negative coccoid bacteria that parasitizes circulating monocytes intracytoplasmically in clusters of organisms called morulae. *Ehrlichia canis* is transmitted by the brown dog-tick *Rhipicephalus sanguineus* and rarely by other ixodid ticks (Breitschwerdt, 2000).

A 2 year old German shepherd dog was presented at Referral Veterinary Poly clinic at Indian Veterinary Research Institute with the complaint of anorexia, weakness and depression. Animal was having vomiting and diarrhoea a few days ago. On clinical examination heart rate was 62/minute; respiration rate 32/minute and rectal temperature 104.2°F. Mucous membrane was pale and anaemic. Animal was dehydrated. Ticks were noticed on animal. Blood smear was prepared by taking blood from ear vein. On blood smear examination, Ehrlichia were detected on Giemsa staining from typical parasitological, morphological and staining characteristics. Small, coccobacillary shaped, intracellular Ehrlichia were noticed within circulating monocytes. Hematology revealed low monocyte percentage (1.8%), low total erythrocyte count (TEC) (4.45 mcm) and hemoglobin concentration (Hb %), (8.4%).

Doxycycline (Doxy® tablet) at a dose of 10mg/kg once daily was prescribed for a period of three weeks to control infection. Paracetamol (paracetamol® tablet) at a dose rate of 10mg/kg was given to prevent fever. Owner was advised to give metaclopramide (perinorm®) injection at a dose of 0.2 mg/kg or 1ml of injection in case of vomiting intravenously. Revici® 2ml

intravenously to check haemorrhages. Normal saline 500 ml were given intravenously. Owner reported on 5<sup>th</sup> day after treatment and improvement in condition was notice. Animal was taking food and water normally. On re examination of blood smear no parasites were found. But still doxycycline was continued and other medicines were stopped.

Ehrlichiosis is important disease affecting dogs (Ettinger and Feldman, 2000). It affects monocytes and granulocytes causing immune system impairment. It also results in anaemia due to blood loss (Greene, 1998). Diagnosis usually depends on history, clinical signs and laboratory tests. These include blood smear examination, differential leukocyte count (DLC), total erythrocyte count (TEC) and hemoglobin concentration (Hb%). As it is transmitted from affected dog to normal dogs via ticks hence proper guidance to owners is essential for control of Ehrlichiosis.

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