**CHAPTER-5**

**DISCUSSION**

The present study was conducted to diagnose the Ileocolic intussusception of a male Doberman dog by means of ultrasonograhy and contrast radiography and to compare the haematological parameters of a four-months-old male doberman dog with normal value. In our case study, ultrasonography and contrast radiography indicated that the dog was suffering from ileocolic intussusceptions. Since ultrasonography and radiographic evaluation of affected site are very helpful in establishing definitive diagnosis (lamp,1997). A cylindrical intestinal mass with a characteristic "ring sign'' is highly specific for intussusceptions (Lamp,1997). In this case, Alternating hyperechoic and hypoechoic concentric rings are present within the lumen of a distended loop of bowel, giving the typical "target" sign (Figure:7) which showed similar to the findings of Lamp (figure:5) (1997). A longitudinal view of the intussusception  notice that multiple layers of bowel wall are within the lumen of the intussuscipiens (Figure:8). The outer ring was the distal segment (colic segment); and the inner first ring was ileum and formation of ileocolic intussusception. So,ultrasonography may provide a sensitive, specific and accurate method of diagnosing intestinal intussusceptions in young dogs (Pietra *et al.*, 2003). The hematological values suggested stress and enteric disease condition of presented dog. Values of red blood cells (5.06\*103/ μL) (Normal value: 5.50-8.50\*103/ μL), hemoglobin (10.5g/dl) (Normal value:12-18g/dl) and haematocrit (35%) (Normal value: 36%-59%) have fallen below the normal range possibly due to the passing of fresh blood in faeces (Jain, 1986). Also the lymphopenia (0.81\*103/μL) (Normal value: 1-4.80\*103/μL) in this case was indicative of acute infection (Table 1). Furthermore, leucocytosis and lymphopenia were suggestive of stress; this is in agreement with the findings of Fossum *et al*., (2002) who reported lymphopenia in stress conditions of animals. Laboratory findings may reveal anaemia in case of intestinal intussusception (Fossum *et al*., 2002). Low hematocrit value (35%) may be the result of minor intestinal hemorrhages (Dixon, 2004). Vomiting is the principal sign and losses of electrolytes constitute a significant clinical problem (Benjamin *et*  *al*.,1995).The formation of ileocolic intussusception is proposed to be result of lack of homogeneity of the bowel wall.This inhomogeneity may be caused by any abnormality within the bowel wall that alters the local intestinal motility and pliability (Applewhite *et al,.* 2002). Ileocolic intussusception cases have rarely been reported in Doberman dog. It is more prevalent in German Shepherd dogs (Oakes *et al*., 1994; Dixon, 2004). Furthermore the age of dog reported in the present case was four months, while 80% cases of intestinal intussusception have been reported in pups under one year of age (Dixon, 2004). The case under discussion showed a complaint of less frequent vomiting and chronic bloody diarrhoea that are typical signs of ileocolic intussusception (Lewis and Ellison, 1987). Intestinal intussusception has varied etiologies such as intestinal parasitism, viruses, linear foreign bodies, and prior abdominal surgery (Wilson and Burt; 1974). In our case, It is being hypothesized that ileocolic intussusception is being reported due to ingestion of pesticide power (Methyl bromathion). Accumulation of gas proximal to the intussusception may be observed on plain radiography. Intestinal intussusception in young dogs is usually suspected on the basis of abdominal palpation which feels like a defined, firm, tubular structure that should be differentiated from feces and foreign bodies.