EXPERIMENTAL STUDIES ON INTESTINAL OBSTRUCTION IN DOGS

CLINICAL AND HEMATOLOGICAL FINDINGS ON ILEUM OBSTRUCTION AND AFTER ITS RELIEF

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In order to obtain basic data for surgical control of the intestinal obstruction in dogs, clinical and hematological examination were carried out using 8 healthy dogs. Experimental obstruction was established by severing the end portion of the ileum. Four days after the obstruction the ileum was relieved by side-to-side anastomosis.

The results were as follows:

1) After the obstruction, the general condition of the dogs, which showed dehydration and oliguria, deteriorated. However, the deteriorated condition improved within one week after the relief and some dogs expelled soft feces for two weeks.

2) After the obstruction, the conjunctival congestion and the dryness of the oral mucous membrane were observed in some cases. The conjunctival congestion disappeared, but the dryness of the oral mucous membrane remained 2 to 4 days after the relief. Some dogs showed anemia up to the 13th day after the relief.

3) A decrease in plasma sodium and chloride and an increase in potassium were observed after the obstruction, but these changes returned to normal within one week after the relief.

4) Whole blood pH and plasma CO₂ content increased gradually in the cases which showed exhaustion symptoms. After the relief, a decrease in these values was observed in the cases showing soft feces for a long time.

5) The values of blood urea nitrogen, blood glucose, and icterus index were slightly high before the relief and for some days after it. These values returned to normal within one week after the relief.