



## Effect of oxytetracycline administration on serum amylase activity in calves

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**Background and Aims:** Tetracycline and related compounds are used extensively as broad spectrum antibiotics in the treatment of bacterial infections in ruminants. Tetracycline may cause acute pancreatitis which may result in increased serum amylase activity. However, it has been shown that administration of oxytetracycline in human results in decrease serum amylase activity.

**Methods:** In this study changes in serum amylase activity were measured in 20 clinically healthy calves following intravenous injection of oxytetracycline hydrochloride at 10 mg/kg of body weight. Blood samples were collected at 30, 60, and 120 minutes after oxytetracycline injection. Serum amylase activity was measured using the amyloclastic assay.

**Results:** The activity of serum amylase was increased significantly ( $P < 0.05$ ) at 30 (40.5%), 60 (35.1%), and 120 (39.3%) minutes after oxytetracycline hydrochloride administration.

**Conclusions:** To the authors' knowledge this is the first study on the acute effect of tetracycline administration on serum amylase activity in calves.

**Keywords:** Amylase; Calf; Oxytetracycline