

## Effect of Hermaphrodite on some Hematological and Biochemical Parameters in Goats

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### Abstract

In this study hermaphrodite in goat were taken. For this purpose three infertile goat at age of 3.5-5 month culled from a herd managed at Basra provenience .A similar number of healthy goat were taken as a control group. The weight of each an animal were recorded, while the length of each organ taken after slaughtering of the animal of both group. The aim of study is to evaluate the properties and serum activity of Alkaline phosphatase(ALP),serum Glutamic oxaloacetic tran samines (SGOT),serum Glutamic pyruvate transaminas(SGPT) and serum cholesterol. In addition to calculate the volume of packed cell volume (PCV) and hemoglobin(HB). Blood samples for PCV and HB as wall as for serum were collected from jugular vein. A significant reduce in packed cell volume (PCV) and hemoglobin (HB) of hermaphrodite goat from that of normal one (control group) Similar finding with the values of SGOT and SGPT concentration .However the concentration of serum cholesterol in hermaphrodite were mach higher that that of serum cholesterol in control group while the concentration of Alkaline phosphates were lower than that of control group.Therefore it seem to be so important to carry on the study to create abase for wide characterization of the syndrome in domestic goat .

### الخلاصة

في هذه الدراسة تناول ثلاث حالات للمعز المصابة بالخنائنة والتي تتراوح أعمارها من 3,5-5 أشهر خلال تقييم فعالية الأنزيم الألكالين فوسفاتيز ALP وكلوتامك اوكرالو أستك ترانسمنس SGOT وكذلك أنزيم كلوتامك بايروفيت ترانسمنس SGPT في مصل المعز انخفاض معنوي عن المجموعة الطبيعية وكذلك الكوليسترول في الحيوان المصاب اكثر من المجموعة الطبيعية .وبعد ذلك تم قياس كريات الدم المرصوصة والهيموغلوبين الدم في الحيوان المصاب بالخنائنة ولوحظ ايضاً انخفاضاً معنوي مقارنةً بالمجموعة الطبيعية للحالة وتمت عن طريق سحب الدم من الوريد الوداجي .

### Introduction

Hermaphrodite is a condition occurring in twins of different sexes where an imperfect masculinised seriate female twin is born with a male. The syndrome has been mostly reported for cattle and sheep(Allard *et al.*, 2000; Antonov, 1979). The clinical signs of the hermaphrodite at age of three to six weeks are the Absence of the external os, preventing development of cervix and Vagina in the female fetus(Azab and Abdel-Maksoud, 1999).

No traces of cervix or uterus were present and the vagina was represented in its caudal part only .High alkaline phosphates activity was detected in cervix and vagina.(Cole, 2003) showed that while a testis placed near the genital duct of a female could support development of the wolffian duct and induce regression of the Mullerian duct. The fetal testis produces a substance capable of inhibiting mullerian duct development in vitro this substance, which appears to be of large molecular protein (Josso *et al.*, 1975).. In hermaphrodite the cervix was absent but the vestibule and the uterine horns were present showed(Rajakoski & Hafez, 2005).