



بسم الله الرحمن الرحيم

**Sudan University of Science and Technology**  
**College of Veterinary Medicine**



Effects of ketamine on the Clinical parameter and some  
haematological parameters of rabbits

A research submitted in partial fulfillment of the requirements of the  
bachelor degree in Veterinary Medicine and animal surgery (honor)

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## الإستهلال

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الا هو العزيز الحكيم)

صدق الله العظيم

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## *DEDICATION*

*To our fathers, mothers, brothers and sisters.*

*TO all our friends and all people who supported us during this study*

*With great love*

## *Acknowledgements*

*First of all, our sincere thanks to Allah who gave us the power and patience to begin and complete our study.*

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## Abstract

The study aimed to investigate the effects of ketamine on the clinical and some haematological parameters in rabbit. Four healthy rabbits in aged about two and three months were selected randomly to be used for this study and divided into two groups (control and anesthetic). Anesthetic group was injected by 1ml ketamine (5mg/kg) intramuscular and then we were measuring clinical parameter (heart rate, respiratory rate, rectal temperature) after 30 minutes and then the blood sample was taken from the jugular vein to measure haematological parameter. And also the clinical and haematological parameter was measured in the control group. And the data was analysis by SPSS program using independent t test. The obtained result showed significant decreased in clinical parameter and its value ( $\leq 0.05$ ) compared to control group. The result of PCV and haemoglobin concentration show slight non-significant increase in anesthetic group compared to control group. The total leukocytes count values were significant decreased and its value ( $P \leq 0.05$ ) in anesthetic group compared to control group.

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هدفت الدراسة لأستقصاء تأثيراتالكيتامينعلي المقاييس الاكلينيكيه ومقاييس الدم في الارانب.تم اختيار أربعة أرانب صحية تتراوح اعمارها بين (2-3) اشهر وقسمت الي مجموعتين المجموعة الاولي مجموعة تحكم والمجموعة الثانية المجموعة المخدرة وتمحقنها ب 1مل (5ملجم/كجم) من مادة الكيتامين في العضل.بعد 30 دقيقة من التخدير تم قياس المقاييس الاكلينيكية (معدل ضربات القلب ، معدل التنفس و درجة الحرارة ) بعدها تم اخذ عينة الدم من الوريد الوداجي لحساب مقاييس الدم ، وايضا تم حساب المقاييس الاكلينيكية ومقاييس الدم في مجموعة التحكم .وتم تحليل البيانات بواسطة برنامج SPSS باستخدام اختبار Independent\_T النتيجة المتحصل عليها اظهرت انخفاضاً معيارياً في المقاييس الاكلينيكية وكانت قيمته ( $\leq 0.05$ ) مقارنة مع مجموعة التحكم . واطهرت نتيجة مكداس الدم والهيموجلوبين زيادة غير معيارية في المجموعة المخدرة مقارنة مع مجموعة التحكم ، ومعدل كريات الدم البيضاء انخفض انخفاضاً معيارياً قيمته ( $P \leq 0.05$ ) في المجموعة المخدرة مقارنة مع مجموعة التحكم.

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