

### Ministry of Higher Education and

### Scientific Research University of Al-Qadisiyah College of Veterinary Medicine



## Morphological study of placental Binucleate cells and syncytia in sheep and goats

### A research

Submitted to the Council of the College of Veterinary Medicine/ University of Al-Qadisiya in Partial Fulfillment of the Requirements for the Degree of PH. of Science in Veterinary Medicine Sciences / Veterinary Surgery

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Supervised by

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2017 AD 1438 AH

بسم الله الرحمن الرحيم (( وقل ربِّ زدني علماً)) صدق الله العلي العظيم

Certificate of supervisor
I certify that Mohammad Abbas Lafta and Rusul Abbas
·
abdul Amir have completed the fulfillment of their graduation
project entitled Morphological study of placental binucleate
cells and syncytia in sheep and goats for the year 2016-2017 /
under my construction.

### supervisor

### Prof. asst. Abbas Fadhil Daham

March 2017

### Certificate of instructor

We certify that **Mohammad Abbas Lafta** and **Rusul Abbas abdul Amir** have completed the fulfillment of their graduation project entitled **Morphological study of placental binucleate cells and syncytia in sheep and goats** for the year 2016-2017 / under my construction .

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March 2017

### **DEDICATION**

### Dedicate this search to

- My parents.
- All members of my family.
- My friend martyr lieutenant Youssef Al-Zamili and all martyrs of Iraq .
- All my teachers.
- My dear doctor Dr. Abbas Daham
- Anyone who helped me in this research.

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All thanks and appreciation to my family, especially my father and mother for their encouragement, patience and help over the years, we owe forever to our fathers who have always kept me in their prayers.

### **Summary**

The present study was conducted to examine the morphological alterations in binucleate cells and syncytia structures of placenta of sheep and goats in throughout different stages of pregnancy. Placentoms were collected from 11 pregnant slaughtered sheep and goat at different gestation periods, from AL.Najaf slaughter house. Tissue specimens for microscopic examination were taken and examined under the microscope. The results revealed that there were morphological alterations in the formation, numbers, and the size of the binucleate cells and syncytia according to stage of gestation. Binucleate cells and syncytia were few in number in late pregnancy. While the syncytia were small in size in both early and late pregnancy.

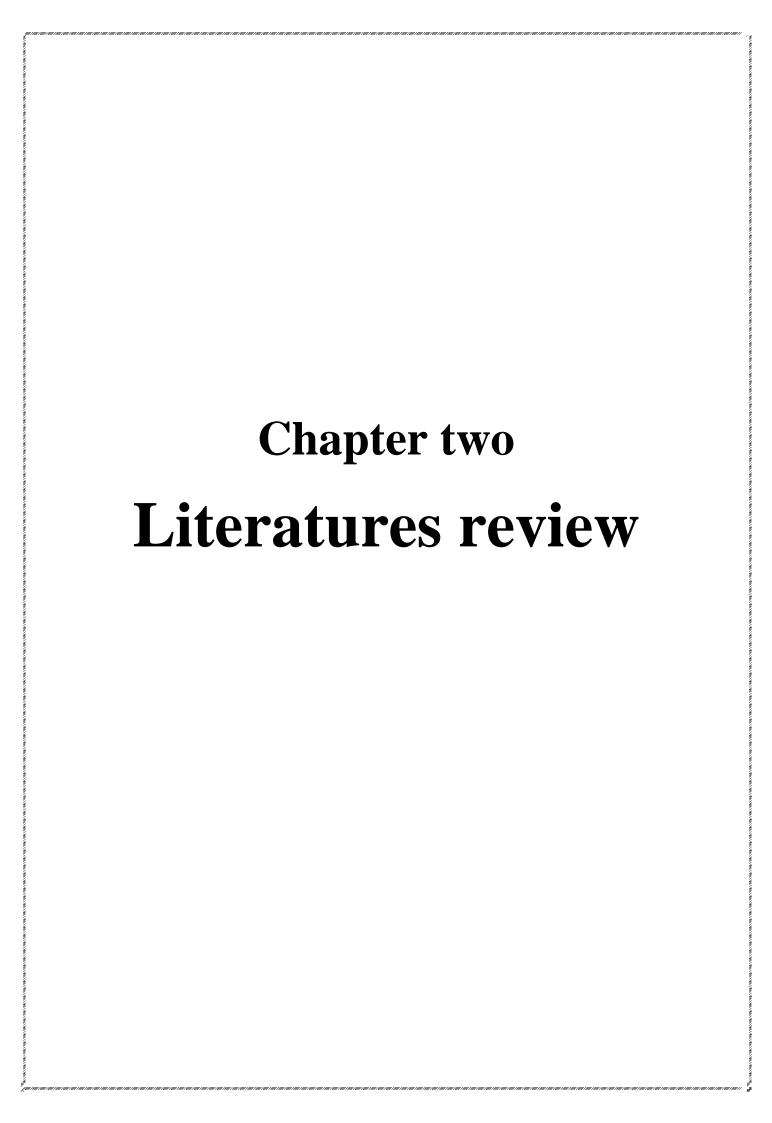
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# Chapter one Introduction



## Chapter three Materials and methods

### Chapter four Results

**Chapter five** 

### **Discussion**

## Chapter six Conclusions and Recommendations

