STUDIES ON IN VITRO MATURATION AND FERTILIZATION OF CAMEL OOCYTES

Amr Mohamed Mohamed El sanea, Hodallah H Ahmed, Abdel-Kadar A Zaki, Ahmed S Abdoon,
Cairo University
Giza, Egypt

Master (Msc) Thesis, 2006

Abstract
The present study was carried out to investigate the different factors affecting IVM of camel oocytes and the ability of the in vitro matured camel oocytes to be fertilized in vitro using frozen-thawed camel semen. For this purpose, seven experiments were conducted. In experiment 1, the quality of oocytes collected during breeding season was better than those collected during non-breeding one. In experiment 2, maturation of oocytes recovered from mature non-pregnant camels was better than those recovered from pregnant ones. In experiment 3, the oocyte yield and quality were better in those recovered by slicing than aspiration method. In experiment 4, addition of FSH either alone or in combination with hCG to maturation medium induced a better cytoplasmic and nuclear maturation. In experiment 5, addition of FCS to maturation medium induced a better cytoplasmic and nuclear maturation of camel oocytes than bull camel serum. In experiment 6, TCM-199 medium produced better cytoplasmic and nuclear maturation than other media. In experiment 7, the cleavage rate of in vitro fertilized camel oocytes was 30% however, none of the oocytes was developed to the blastocyst stage.

Keywords
IVM, camel, semen, oocytes, in vitro,