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ASSESSMENT OF THE VIABILITY OF CAT OOCYTES SUBJECTED TO STORAGE AT DIFFERENT TIME INTERVALS

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• Introduction

The domestic cat is an important model for assisted breeding technology. Based on cumulus oocyte complexes, in vitro maturation and fertilization methods can be developed in endangered cats. The aim of this work was to investigate prolonged storage at 4° C on the survival of cat cumulus oocyte complexes.

• Material and method

The ovaries were obtained from 20 domestic cats. The ovaries were evaluated at different time intervals.

The viability test for cumulus oocyte complexes was performed at 2 hours, 24 hours and 72 hours after being sampled.

Tests for the viability of cumulus oocyte complexes were performed with Neutral red and Trypan blue.

Storage conditions for cumulus oocyte complexes are a critical step in establishing fertility conservation protocols in animals, as well as for assisted reproduction.

• Results and discussions

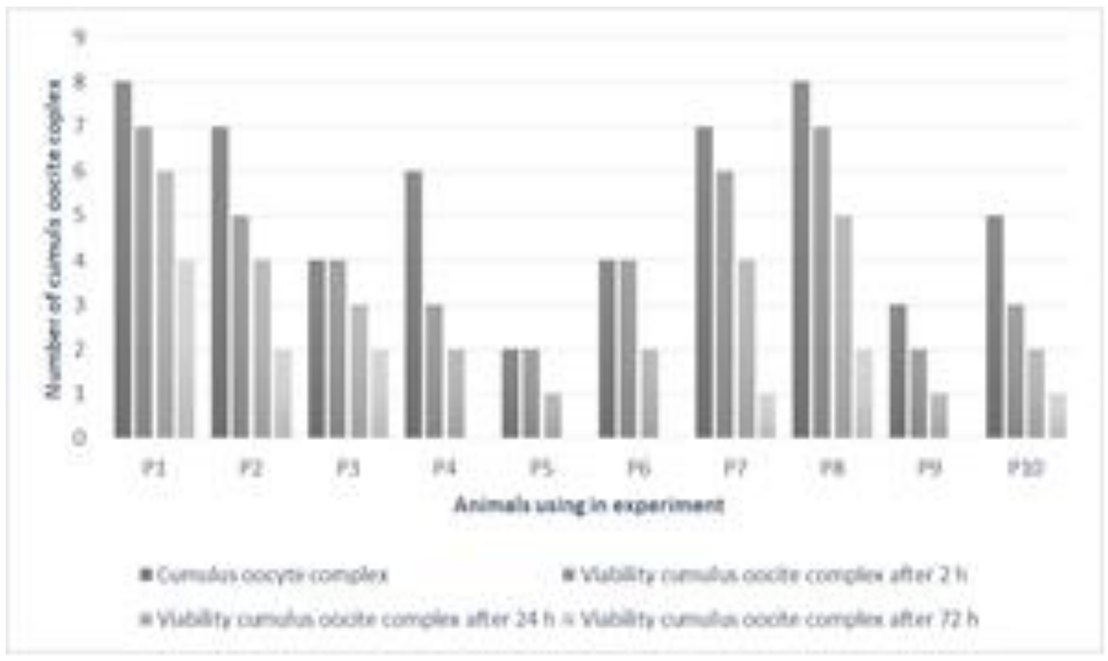

Fig. 1. Analysis the viability of the cumulus oocyte complex in experimental animals based on the cell viability test with Neutral red

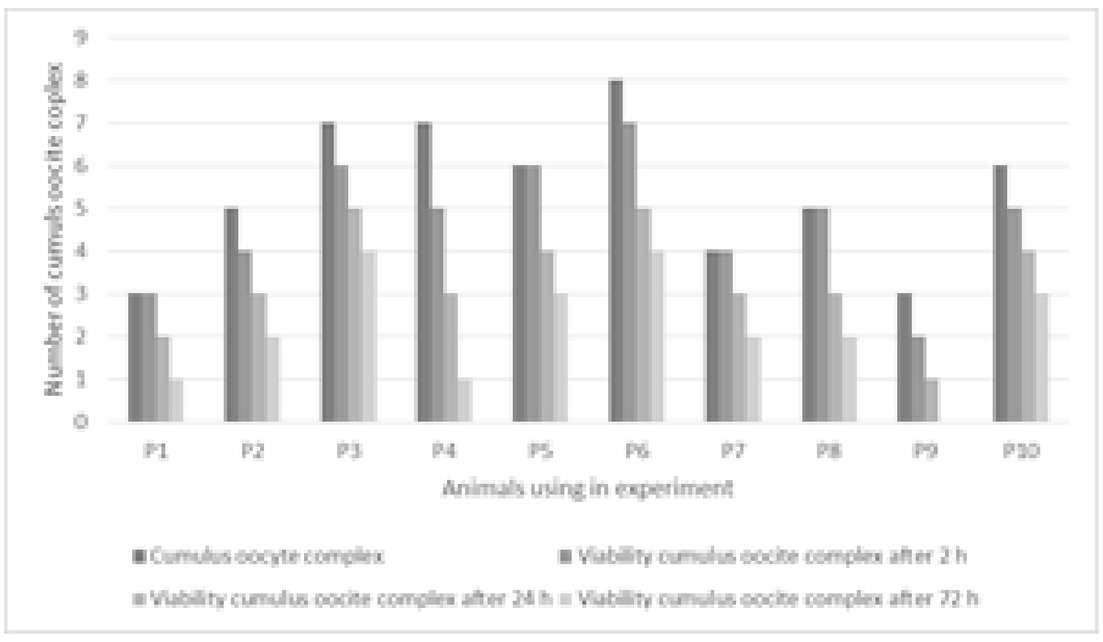

Fig. 2. Analysis the viability of the cumulus oocyte complex in experimental animals based on the cell viability test with Trypan blue

Conclusions

The viability of cumulus oocyte complexes registers statistically significant decreases with increasing time from sampling to use. The cellular viability test with neutral red was identified as the most suitable for highlighting the viability of cumulus oocyte complexes.