

# **Migration and Morphological Study of the Primordial Germ Cells in Camel Embryos (*Camelus dromedarius*)**

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## **ABSTRACT**

The objectives of the study were to investigate the migration and morphology of the primordial germ cells from the yolk sac to the gonads. The study was carried out on 80 fetuses, their ages ranged between 2 cm crown vertebral rump length (CVRL) (71.01 days) and 105 cm CVRL (352.43 days) covering the three trimesters. The primordial germ cells migrated to pseudopodi from the yolk sac to the gonad through the dorsal mesentery. And they were already settled in the gonad at the age of 2 cm CVRL. The primordial germ cell detached from the wall of the yolk sac contained dilated cisternae of RER, few numbers of mitochondria, lipid droplets and multivesicular microbodies. The nucleus possessed fine chromatin and prominent nucleolus. And the RER in the gonad was arranged into oval or round cisternae. The primordial germ cells demonstrated weak PAS reaction in early the stage and a negative result in the mesentery and late stage. The primordial germ cells showed positive reaction for alkaline phosphatase and a negative reaction for acid phosphatase.

**Keywords:** *camel, prenatal, primordial germ cells, early and late stage.*