Placentation in rock cavies, *Kerodon rupestris* Wied, 1820

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Abstract

Placentation studies in fourteen rock cavy females in different gestation phases were developed. The females were pre-anesthetized associating ketamine chloride (15mg/kg) and midazolan (1mg/kg). Soon afterwards, they were anesthetized by isoflurane inhalation in association with oxygen at 100% saturation. After the anesthesia, the surgery allowed to exhibit fetal structures and then data collection was performed. Macroscopically, a discoidal placenta, vitelline sack and the amnion of a transparent aspect and avascular, were identified. Microscopically, the umbilical cord presented two arteries, a vein and the allantoid duct, beyond an artery and a vitelline vein. The placenta showed a relationship between the mesometrium and the uterus and was constituted by lobes delimited by interlobular areas and, peripherically, by an area of marginal syncytium containing places with spongiotrophoblast and gigantic trophoblastic cells. The subplacenta was composed by lobules and by a trophoblast of syncytium and cellular nature. The vitelline sack showed a parietal portion sustained by the Reichert’s membrane and a well-vascularized visceral portion. The placentation studies in rock cavies indicated the presence of a bicornuate uterus, a chorioallantoid discoidal and labirynthic placenta, with a hemochorial placental barrier of hemomonochorial subtype separating the maternal-fetal countercurrent sanguine flow.

Key-words: Rock cavies. Placenta. Microscopy. Placental barrier