

# Cytological characterization of the germinal line during testicular differentiation in the lizard *Liolaemus gravenhorsti* (gray)

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The gross morphology, histology, and ultrastructure of *Liolaemus gravenhorsti* gonads prior to and after differentiation are described. Special emphasis has been given to characterization and changes of the germ cell line throughout intrauterine development and 3 days postpartum. During the pregonadal stage, the primordial germ cell migrates toward gonadal rudiments by way of the mesenchyme. These cells can easily be identified by their great size, voluminous and lobulated nucleus, great quantities of yolk platelets, microtubules, and numerous lipid inclusions. In the undifferentiated gonad, the germ cells (type 1 gonocytes) have an ovoid or spherical shape and autodigestion of yolk platelets, great development of Golgi complex, and mitochondrial aggregation, though fewer liposomes, pseudopodes, and microtubules were noted. Concomitantly with the beginning of mitosis, a third type of germ cell appears, the type 2 gonocytes, which are smaller, with poorly defined membranous systems in var