

A MORPHOMETRIC STUDY ON THE PANCREAS OF THE CAMEL FOETUS (*Camelus dromedarius*)

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ABSTRACT

Standard Stereological methods of the point-counting techniques were applied to study certain components of the camel foetus pancreas at different embryological stages (First, second and third trimester). The volume densities (Vv) of the acini, ducts, islets of Langerhans, connective tissue and blood vessels were determined and hence the percentage volume for each component. Both ducts and islets of Langerhans were not observed in the first trimester hence they were excluded. In the first trimester the acini occupied less than half the volume of the pancreas followed by connective tissue (44.62% and about 0.71 cm³ absolute volume). In the second trimester the acini occupied half of the volume of the pancreas (54.98% and about 1.48 cm³ absolute volume) at the expense of the connective tissue. The ducts and islets of Langerhans which were first appeared in the second trimester showed results of 3.30%, 0.1 cm³ and 1.82% , 0.05 cm³, respectively. In the third trimester the acini and islets of Langerhans underwent further increase in size and occupied 60.95%, 2.55 cm³ and 2.48, %, 0.10 cm³, respectively.

Key words: Camel, development, embryology, morphometry, pancreas