

Histomorphometrical Studies of Endocrine Part of Pancreas in Prenatal Goat (*Capra hircus*)

Dharmendra Singh, Ajay Prakash, Pawan Kumar and Singh Abhishek D. Singh

College of Veterinary Science & Animal husbandry, DUVASU, Mathura (Uttar Pradesh), 281001

Abstract—The present study was conducted on the 24 healthy and normal embryos/ foeti of non-descript goat (*Capra hircus*) varying from day old to 150 days of gestation. The embryo/ foeti were assigned into three groups according to their gestational ages; Group I (0-50 days); Group II (51-100 days); Group III (101-150 days). The tissues were fixed in 10% buffered formalin and were processed by routine paraffin embedding technique. Five to Six micron thick paraffin sections were stained by hematoxylin-eosine method. The micrometrical parameters were recorded with the help of computerized Motic 2.0 software. At 42 days of gestation of goat foeti the endocrine part first observed as small acidophilic aggregation of cells which were generally spheroid, oval and irregular in shape. In group I these developing islets of Langerhans had range of 14.57 to 27.86 μm and average diameter of $20.10 \pm 1.74 \mu\text{m}$. The average diameter of islets in group II was $31.18 \pm 6.2 \mu\text{m}$ with the range of 16.20 to 73.72 μm . In group III the values of endocrine mass were $35.12 \pm 3.29 \mu\text{m}$ with the range of 18.26 to 47.72 μm .