Development of the Mesonephros in Camel (Camelus dromedarius)

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Abstract:

The study of the development of the mesonephros in the camel (Camelus dromedarius) was carried out on 16 embryos ranging from 0.9 to 8.6 cm crown vertebral rump length (CVRL). At 0.9 cm CVRL, the mesonephros is represented by a narrow strip along the roof of the thoracolumbar part of the vertebral column. At 1.4 cm CVRL, some of the mesonephric tubules are canalized but others are still solid. The mesonephric corpuscles are well developed at 1.9 cm CVRL and occupy almost the entire abdominal cavity in between the liver and the gut. Histologically, the glomeruli occupy the ventromedial aspect of the mesonephros while the mesonephric tubules become numerous, larger and more coiled. At 3 cm CVRL, the metanephros is invaginated in the caudal pole of the mesonephros, and the mesonephric tubules in some areas are differentiated into secretory and collecting tubules. At 3.5 cm CVRL the mesonephros is related dorsally to the postcardinal vein and ventrally to the subcardinal vein. At 4.7 cm CVRL continuous regression of the mesonephros from cranialwards to caudalwards is observed. At 5.3–5.5 cm CVRL, the cranial part of the mesonephros is divided into medial and lateral regions, and later the medial region completely disappears and is replaced by the primordium of the adrenal gland. At 8.6 cm CVRL, the caudal part of the mesonephros completely disappears.

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