

LTS006-Poster

Anatomical Study of the Ovine Digital Arteries by Corrosion Casting Method

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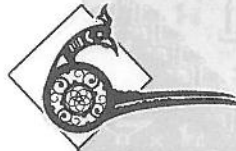
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The importance of vessel structure were investigated in pathogenesis of laminitis in horse and the role and existence of atrio-venous shunts in horse was proven although was not demonstrated in ovine. Just a few articles were published on ovine digital arteries. Corrosion casting method is a method of choice for studying different vessel structures that its efficiency in this kind of studies has been proven previously.

Hind limbs of 15 lambs of 3-month-old were separated from tarsus joint. By dissection of Dorsal metatarsal artery, normal saline and then Resin metacrylat were injected in vessels. After polymerization of Resin metacrylat, saturated sodium hydroxide was put on the hooves for decomposition of tissues.

In this species, dorsal common digital and common plantar digital arteries are main arteries for blood supply. One branch moves to heel bulb and the other moves to abaxial wall and sole. The third branch of these arteries is responsible for blood supply to periopic tissue. Proper digital artery pass into nutritional canal of third phalanx in axial surface of this bone and by means of 3 main branches in internal and external wall supply axial and abaxial wall, sole and white line of the hoof. In contrast to Nickel et al the main artery for blood supply of the hooves is dorsal common digital artery, and the caudal arch has only 3 branches.

Key words: Ovine, Digital Arteries, Corrosion Casting Method



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