University of Mosul Lecture No :3 College of Veterinary Medicine Date: 2024-2025



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Lecture title: Bones of fore limbs

Lecturer Affiliation: Thekra Fadel Saleh, BVMS, MSc.

Scientific degree (Lecturer Assistant.), Department of Anatomy, College of Veterinary Medicine,

University of Mosul, Mosul, Iraq

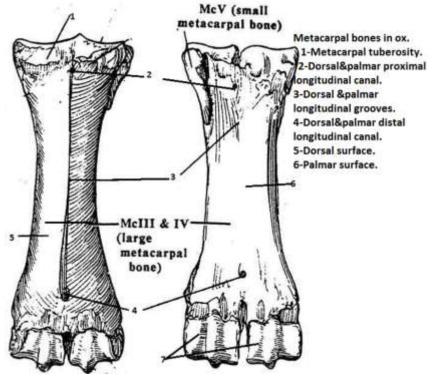
Summary: Metacarpal bones

In ruminants:

The metacarpus consists of large metacarpal and a lateral small metacarpal bone.

1-Large metacarpal bone(McIII+McIV)is bone results from fusion of the third and fourth bones .The dorsal surface marked by the dorsal longitudinal sulcus or groove and proximally there is the lateral metacarpal tuberosity .The palmar surface has palmar longitudinal sulcus ,in the dorsal and palmar surface there are the proximal and distal metacarpal canal. The proximal end or base articulate with distal row of the carpus .The distal end or the head is divided by intertrochlear incisor the head articulate with first phalanx.

The small metacarpal boneIs a rounded rod about 3-4 cm in length ,it attached to proximal part of the lateral border of the large metacarpal bone



distal end is pointed.

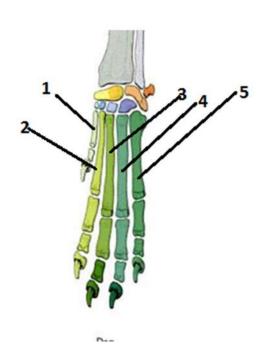
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Metacarpal bones In dog

Five metacarpal bones are present .The first is much the shortest . Third and fourth are the longest ,each consists of body and two extermities. They articulate proximally with distal row of carpal bones and distally with first phalanges .



- 1-First metacarpal bone.
- 2-Second metacarpal bone.
- 3-Third metacarpal bone.
- 4-Fourth metacarpal bone.
- 5-Fifth metacarpal bone

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The digits in ox:

Four digits are present in the ox ,two are fully developed (third &fourth) they have three phalanges and three sesamoids each .

The second and fifth are vestige and are placed palmar to the fetlock as (dew claws) each contains one or two small bone which do not articulate with skeleton.

The digit in ruminant

The digits in dog:

The digits have three phalanges except the first digit consists of two phalanges and very short .Third and fourth digits are the