ability to obtain images on transverse, dorsal and sagittal plane directly or through multiplanar reconstructions. The aim of this study was to produce an anatomical atlas to support CT of the paranasal sinuses of adult horse.

Methods: CT scan on dorsal, sagittal and transverse planes of three adult equine heads was performed. The heads were frozen and cut using a band saw, with the cuts matched as closely as possible to the CT transverse slices. Each CT image was compared with its corresponding anatomic section to assist in the accurate identification of specific structures.

Results: A total of 9 anatomic slices, 44 CT transverse images, 46 CT sagittal images, 33 CT dorsal were obtained and permitted to achieve a comparative atlas of the paranasal sinuses region. The atlas was divided into two sections organized in tables. In the first section, each CT transverse image was compared with its corresponding anatomical sections and relevant structures were identified and labeled. The second section of the atlas consist of tomographic images on dorsal and sagittal planes. Each CT images is completed by an image with reference line for the scan plane.

Conclusions: The association of CT images and gross sectional anatomy allowed a better understanding of the normal anatomy of paranasal sinuses region. The relationship between these complex structures was easily visualized. Excellent anatomical details, good discrimination between bony structures and soft tissues were evident in CT images.

109 - Lymphatic system of mammary glands in cat: application to surgical technique in removal mammary tumours
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Introduction: The mammary gland is a common site of neoplasms in the female cat. All the malignant tumours metastasise to a lesser or a greater extent through the lymphatic system. However the anatomical knowledge of this system is not sufficiently well known in the cat to develop a reasoned model for the extirpation of these glands in case of malignant tumours.

Methods: A study of the lymph drainage in 50 female cats was done by indirect injection in vivo of India ink inside the mammary parenchyma. Mammary glands were then extracted and the thoracic cavity opened. All the lymph nodes were examined after clearing.

Results: Out of the 100 observed mammary chains, the two intermediate mammary glands (T2, A1) may drain caudally to the superficial inguinal lymph centre and/or cranially to the axillary lymph centre. The T1 gland always drains exclusively cranially and A2 exclusively caudally. The two mammary glands (T1 and A1) often drain towards the sternal cranial lymph nodes but 100% of the T2 drain towards it. This research assumes that the limit between the two directions of drainage can exist only between the glands T2 and A1. Clearing has shown several principal routes of drainage, different for each gland. No evidence existed in any of the 65 cases of lymphatic plexuses connecting two adjacent mammary glands in the female cat.

Conclusion: The results obtained with this study permit to produce a new and more complete data that will eventually aid block dissection surgical technique in the removal of malignant tumours in cats.

110 - Morphological study of auditory ossicles in the hamster
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Introduction: The chain of auditory ossicles of the middle ear has a fundamental role in the transmission of sound, and therefore in animal behaviour. Rodents are one of the most diversified and successful mammalian orders. Not only are they widespread geographically, but they also inhabit many different ecological niches. They have been the subject of many anatomical, physiological, ethological, and ecological studies, and some species have become important models in biomedical research.

Methods: Twenty temporal bones derived from 10 adult hamsters, weighing 275–300 g were used for the study. The animals were obtained from the Razi institute in Mashhad, Iran and were not deliberately deprived of life, but rather routinely euthanized after scientific experiments, and so it was not necessary to acquire permission from the Bioethics Committee. After dissecting them, the features of the ossicles were measured with an ocular micrometer and photographed by stereomicroscopy. Finally, data were evaluated and analysed using the Sigma Stat statistics software.

Results: The auditory ossicles were three bones: the malleus, the incus, and the stapes. The lenticular bone was a distinct bone and articulated with the tip of the long crus of incus. The average of morphometric parameters showed that the total length of malleus, incus and stapes were 2.87 mm, 1.18 mm and 0.77 mm respectively. The malleus had two distinct process: lateral and muscular. The rostral process was unclear and not developed. The stapes had a large stapedial base with anterior and posterior cruses. The posterior crus was larger than anterior crus.
Certificate of attendance

As the Chair of the organizing committee of the XXVIIIth congress of the European Association of Veterinary Anatomists (EAVA 2010), I certify that Ahmadali Mohammadpour attended the EAVA 2010, from July 28 to 31, 2010 at the Parc Floral of Paris, France.

Professeur Nathalie Crevier-Denoix