Importance of the anatomopathological study for health students

ABSTRACT
Introduction and objectives: The anatomopathological study helps in the recognition of structural changes that are reflected in cell and tissue function, providing proficiency improvement to those involved in this field, and is essential for the training of health professionals (BERNARD, 1865).

Keywords: necropsy, didactic site, macroscopy, microscopy, pathology.

RESUMO
Introdução e objetivos: O estudo anatomopatológico ajuda no reconhecimento das mudanças estruturais que se refletem na função celular e tecidual, proporcionando melhoria de proficiência aos envolvidos neste campo, e é essencial para a formação de profissionais de saúde (BERNARD, 1865).

Palavras-chave: necropsia, sítio didático, macroscopia, microscopia, patologia.
1 INTRODUCTION AND OBJECTIVES

The anatomopathological study helps in the recognition of structural changes that are reflected in cell and tissue function, providing proficiency improvement to those involved in this field, and is essential for the training of health professionals (BERNARD, 1865). The use of animals in research aimed at understanding biological phenomena has always been present in the scientific act (CHEVILLE, 2009). The objectives of this work were: to analyze macro and microscopically pieces collected in necropsies of small animals donated by the owners, discuss and compare the observed changes given the pathophysiological similarity in diseases that affect both humans and animals; assemble a collection of histopathological preparations, and produce a virtual atlas, still in the process of preparation.

2 MATERIAL AND METHODS

Necropsies were performed at the partner Veterinary Clinic, with the consent and permission of the owners of the animals (canine and feline species) which died from different causes. Tissue and organ fragments, with macroscopic alterations, were collected, fixed in formalin and transported to the Laboratory of Biological Tests of the Federal University of Rio de Janeiro (UFRJ) – Campus Macaé for processing. After embedding the blocks in paraffin and microtomy, the preparations were stained with Hematoxylin and Eosin. In the Histology and Pathology Laboratory they were analyzed and photographed in a light microscope coupled to a camera.

3 RESULTS

Six necropsies were performed and 12 pathological alterations were diagnosed, divided between canines and felines. The alterations found include: atrophy, cardiac hypertrophy, pleural edema, hepatic steatosis, fibrosarcoma, renal failure and vascular congestion. The changes were discussed among the students and teachers involved, photographed and documented. More than 20 histopathological slides were prepared and 12 macroscopic images were obtained, descriptions are already available on the educational website, linked to the official page of UFRJ – Macaé.

4 CONCLUSION

The advantage of the study of comparative anatomopathology is highlighted through necropsies and macro and microscopic observations, allowing the project students to accumulate necropsy practice and to consolidate and expand their Pathology
knowledge. This enables the formation of more qualified professionals in their respective areas of expertise in the health sciences. In addition, the dissemination of data collected on the educational site democratizes knowledge, bringing science to the entire community, linked to this institution or not.
REFERENCES
