



Cairo University

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Faculty of Veterinary Medicine
Department of Anatomy & Embryology



Comparative Anatomical and Ultrasonographical studies on the Liver, Pancreas and Spleen in the Rabbits and Cats

A thesis submitted by

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(Anatomy and Embryology)

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ABSTRACT

(Key words: Liver, Pancreas, Spleen, Anatomy, Ultrasonography, Doppler, Rabbit, Cat)

The current study was performed on thirty-six adult apparently healthy native breeds of Rabbits (*Oryctolagus cuniculus*) as an herbivore model and forty-two apparently healthy adult domestic Cats (*Felis catus domesticus*) as a carnivore model of both sexes with the average body weight ranged from 2.500 – 3.500 kg. This study aimed to anatomically illustrate the morpho-topographic description of liver, spleen and pancreas with their duct system and their arterial and venous vasculature and to identify the ultrasonography of these organs in both animals especially the pancreas due to its surgical importance and little research data available and since these two species are the most commonly used as research models in human clinical medicine. All the animals used were already submitted to euthanasia. The animals divided as specimens for topographical anatomy, for vascular injection with colored latex neoprene, radiographs and for doppler ultrasonography. There were great differences in shape, length, thickness, weight and pattern of vascular supply and duct system of liver, spleen and pancreas between both animals. This investigation aims to study these three organs in details which may help with the planning and application of emerging intravascular interventional procedures.