

Endoscopy and bronchoscopy of dog plastinated specimens

In the research and teaching of biological sciences, animals are used in experiments for dissection or as prosected specimens. Worldwide tens of millions of animals are harmed or killed each year for their cadavers or tissue, in training and experiments. In veterinary training animals can be used to get clinical experience.

The main objective of this project is to attempt to find a new and alternative method which will result in a recognizable reduction in the numbers of animals used in education and research.

ACTIVITIES:

Compare the conventional and alternative teaching programmes in veterinary education.

Development of a new freeware CD-ROM video model to achieve replacement

Distribution of approved alternative educational materials

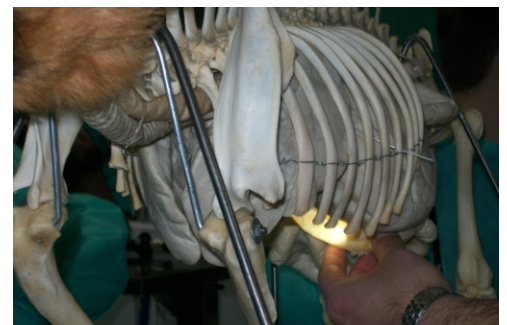


AIMS:

The development of course syllabi for anatomy and clinical programmes in veterinary curriculums incorporating plastinated specimens.

The establishment of a programme for securing ethically-sourced animals and the reduction of animal use in anatomy and surgery training.

The development of a common learning programme based on the learning objectives and programme selection for anatomy and surgery.



ANATOMY CLASSES:

Practice of the digestive and respiratory systems

A whole plastinated canine digestive and respiratory system is specially designed for exercises in endoscopic (esophagogastrosocopy, duodenoscopy and colonoscopy) and bronchoscopic explorations.

The visceral topography and the endoluminal aspects of plastinated organs in the thoracic and abdominal cavity is studied. The dissecting of the dog and the subsequent observation of the internal organs allows the students to study the specific shapes and locations of organs.

BENEFITS AND OPORTUNITIES

The educational benefit is that plastinated specimens would be catalysts for bringing case-based learning into the curriculum. An alternative source of specimens for teaching purposes would support specialist endoscopic training for future veterinarians. Providing them can make a contribution to the education of a future skilled and compassionate veterinarian.

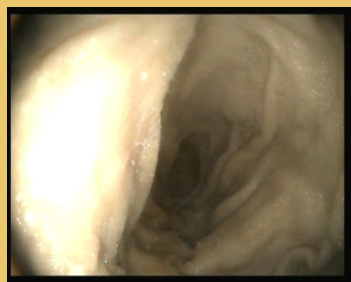
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CLINICAL CLASSES

Test for the efficiency and efficacy of alternative education materials.

A comparison test is performed in the classroom by performing an endoscopy on live animals and on plastinated specimens. Practical training of endoscopy on plastinated specimens and the establishment of clinical learning provides opportunities to replace the use of animals in clinical skills, surgery or other practical classes and establishes a student-based self-experimentation programme for the replacement of animals in practical surgery classes.

Clinical work with animal patients supports progressive teaching and the replacement of animals. It further links to the development of innovative teaching methodologies, curriculum development, and assessment methods



CONTRIBUTION TO EU POLICIES AND EU INTEGRATION

One of the main reasons for developing the project is a requirement in Directive 86/609/EEC on the protection of animals used for experimental and other scientific purposes. This directive requires that the Commission and the Member States actively support the development, validation and acceptance of methods which could reduce, refine or replace the use of laboratory animals.

Article 23:

The Commission and Member States should encourage research into the development and validation of alternative techniques which could provide the same level of information as that obtained in experiments using animals, but which involve fewer animals or which entail less painful procedures, and shall take such other steps as they consider appropriate to encourage research in this field.

Project carried out at : Faculty of veterinary medicine Skopje, R of Macedonia
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