Home-made model for training of basic ultrasound technique

Created on: 22-06-2023 - Last modified on: 22-06-2023

Contact person

Annelies Decloedt

Organisation

Name of the organisation Ghent University (UGent)

Department Veterinary skillslab

Country Belgium

SCOPE OF THE METHOD

The Method relates to	Animal health
The Method is situated in	Education and training
Type of method	Other

DESCRIPTION

Method keywords

veterinary medicine

skillslab training

ultrasound

dummy

Scientific area keywords

Veterinary education

clinical training

Method description

In the skillslab, dummy models and simulators are used for teaching various clinical skills. Basic experience of ultrasound technique and how to work with an ultrasound machine can be obtained using a basic model containing different 3D structures. An important part of this first training process can be performed on a simulator in the skillslab.

Lab equipment

Home-made basic model: a fluid-filled vacuum bag containing different 3D structures. The bag is placed in a small plastic container.

Method status

Still in development
History of use
Internally validated

PROS, CONS & FUTURE POTENTIAL

Advantages

The use of educational animal models in a skillslab offers a number of significant advantages:
- Reduced use of laboratory animals and reduced discomfort for patients, as procedures can be practised on dummy models and simulators before performing them on a live animal.
- Teaching of clinical skills in a quiet and safe environment, reducing anxiety and stress for the veterinary student.
- Complex practical skills can be split into a number of small steps when practising them in the skillslab.

Challenges

- Clinical training on live animals needed as well.
- Creating and repairing the home-made models is time consuming for a large group of students.

- A difficulty creating an ultrasound model is that air cannot be present in the bag (otherwise you have a lot of artefacts).

Modifications

Towards the future it will probably be attempted to create a more complex model with anatomically more realistic structures.

Future & Other applications

Training for lab animal medical imaging techniques.

REFERENCES, ASSOCIATED DOCUMENTS AND OTHER INFORMATION

Coordinated by

sciensano

VUB

Financed by

Vlaanderen
verbeelding werkt

bruxelles environnement
leefmilieu brussel
.brussels