

Animal dummy models and simulators for training of injection techniques and intravenous catheterisation procedures

Created on: 15-02-2023 - Last modified on: 15-02-2023

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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: Dummy models and simulators

DESCRIPTION

Method keywords

veterinary medicine

dummy

skillslab training

injection techniques

catheterisation

Scientific area keywords

Veterinary education
clinical training

Method description

In the skillslab, dummy models and simulators are used for teaching various clinical skills. The veterinarians in training need to learn how to administer intramuscular, subcutaneous, intradermal and intravenous injections to different animal species. Furthermore, they need to learn intravenous catheter placement and infusion techniques. An important part of this training process can be performed on dummy models and simulators in the skillslab.

Lab equipment

Commercial dummies:

- silicone dog and cat manikins (for intramuscular injection)
(<http://www.paws2claws.com/>)
- stuffed toy dogs and cats (for subcutaneous injection)
- canine cephalic vein model (for intravenous injection and catheterisation)
(<https://www.formafundo.nl/>)
- pig model for intradermal injection

Home-made dummies:

- small breed canine cephalic vein model
- canine jugular vein model
- equine and bovine jugular vein model
- model for chipping of a puppy

Method status

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

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

Modifications

Further optimisation of home-made models and purchasing available commercial models.

Future & Other applications

Training for lab animal surgical procedures.

REFERENCES, ASSOCIATED DOCUMENTS AND OTHER INFORMATION

Associated documents

[Injectie hond IV.jpg](#)

[Injectie hond.JPG](#)

[Varken model injecties.jpg](#)

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