

Alternatives in Veterinary Clinical Procedures Training

Models/Simulators

DASIE-CM™ (Dog Abdominal Surrogate for Instructional Exercises – Cervical Model)

Abstract:

The DASIE-CM™ contains tubes that represent jugular veins and a trachea. When attached to a source of fluids, this model can be used to practice jugular venipuncture and the placement of catheters for bronchoalveolar lavage.

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Rescue Critters® Animal Training Mannikins

Abstract:

- **“Jerry” K-9 CPR Mannikin:** This manikin has working lungs, artificial pulse, disposable and cleanable parts. It is designed to perform CPR compressions, mouth-to-snout resuscitation, splinting, and bandaging. “Jerry” has realistic features and approximates a 60-70 lb. dog.
- **“Fluffy” Cat CPR Mannikin:** Like “Fluffy’s” canine counterpart, this manikin has working lungs, artificial pulse, disposable and cleanable parts. It is designed to perform CPR compressions, mouth-to-snout resuscitation, splinting, and bandaging. “Fluffy” has realistic features and fur color may vary.
- **Advanced Airway “Jerry”:** This manikin has representations of the trachea, esophagus, and epiglottis. It is designed to perform endotracheal placement, CPR compressions, mouth-to-snout resuscitation, splinting and bandaging. It has working lungs, artificial pulse, disposable and cleanable parts. “Jerry” has realistic features and approximates a 60-70 lb. dog.
- **K-9 IV Trainer:** This artificial front limb model is designed to perform IV draw and injections. It has realistic features, disposable and cleanable parts.
- **“Critical Care Jerry”:** This manikin has all of the features of the “Advanced Airway Jerry” and the K-9 IV Trainer front limb in one “body.” It also has the ability to aspirate air and fluid from the thoracic cavity as well as jugular vascular access.
- **K-9 Intubation Trainer:** This artificial head model has representations of the trachea, esophagus, and epiglottis. It is designed to perform endotracheal placement with pass or fail feature. It has realistic airway, working lungs, cleanable parts, and table clamp with pivoting base.
- **Suture arm:** This artificial limb is designed for both internal and external sutures. It has realistic skin and can be cut in as many places as desired. It has an indefinite shelf life and is affordable enough for each student.

- “Jerry Jr.” First Aid Trainer: A plush manikin designed to simulate compressions, splinting and bandaging. A perfect addition to “Jerry” and “Fluffy” in a class setting.
- CeePeR Dog: This manikin is designed to perform CPR compressions, mouth-to-snout resuscitation, splinting, and bandaging. It has working lungs, removable fur for cleaning, disposable and cleanable parts.
- Custom products: Rescue Critters® have made custom manikins for several universities and companies. If there is a special need for a veterinary training manikin, a realistic animal for filming, or special effect needing animatronic realistic animals, Rescue Critters® is able to provide a quote.

Contact Information:

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Published Material:

Accent on an Alternative: Vascular Access Models Help to Keep it Critical at UPENN!
Alternatives in Veterinary Medical Education Newsletter 14:3,8, April 2000.

“...The animal mannequins provide the opportunity to practice actual critical care procedures in field training exercises.”

KOKEN Rabbit and Rat

Abstract:

The KOKEN Rabbit model contains an anatomically correct cranial bone, pharynx, larynx, trachea, stomach, and urethra. The rabbit model can be used for practical training in proper animal handling and restraint, peroral dosing, intravenous injection and blood collection from the auricular vein, endotracheal intubation, and urine collection via urethral catheterization.

The KOKEN Rat model contains an anatomically correct pharynx, larynx, trachea, stomach, and tail vein. The rat model can be used for practical training in proper animal handling and restraint, peroral dosing, intravenous injection and blood collection from the tail vein, and endotracheal intubation.

Both models are life-sized silicon and soft vinyl chloride replicas that look and feel like the real thing. They can be reused countless times, although the manufacturer recommends frequent cleaning and handling “as carefully as you handle a living animal.” The models provide immediate feedback. When a needle is correctly inserted into the vein, the simulated blood will reflux. Proper orotracheal intubation can be visually confirmed. As fluid fills the stomach, it can be seen through a transparent portion of the abdomen, making it easy to see how much fluid has been given. Both models have drainage tubes for emptying the stomach following dosing.

Contact Information:

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Published Material:

Accent on an Alternative: KOKEN Rat and KOKEN Rabbit. *Alternatives in Veterinary Medical Education Newsletter* 7:3, 1998.

“...The main purpose of the project was to respect life and promote animal welfare by alleviating the suffering of animals and reducing the number of laboratory animals used in experiments.”

Vascular Access Training Models (VATMs)

Abstract:

These lifelike animal mannequins permit training of veterinary students and technicians in venipuncture and vascular access techniques. VATMs are designed to provide students with the correct look and feel while learning to give injections, place catheters, or draw blood. Repeated use of these models will help students develop the skills and confidence necessary for vascular access before their first experience with a live animal.

Special features of the VATMs include identifiable and palpable structural landmarks, replaceable vessels, flashback response, and a moveable, replaceable skin and components to provide longevity for the model.

Two models are available:

- Canine head and neck: Consists of a sculpted mandrel containing channels for a simulated jugular vein covered with a moveable latex “skin”. It can be used to teach advanced techniques such as placement of through-the-needle catheters, special procedures like the Seldinger (guide wire) Technique for placement of multi-lumen and pulmonary artery catheters, and blood collection techniques with a syringe and needle, or through an existing catheter.
- Canine foreleg: Similar construction to the Canine head and neck model and contains a simulated cephalic vein. It can be used to teach students blood collection, fluid and drug administration, and the fundamentals of catheterization using the butterfly and over-the-needle catheter.

An instructional videotape pertaining to the use of these models is included at no extra charge. Replacement skin and tubing is available for both models.

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Web site: <http://www.calf.vetmed.ucdavis.edu/html/vatm.html>

Videotapes

The items in this category are numerous. The following are some good examples.

Blood Sampling – Part 2: The Collection of Blood Samples in Small Animals

Abstract:

This video concentrates on site selection, equipment choice, methods of restraint, and proper venipuncture technique for the feline and canine.

Order #D-0180

Contact Information:

American Veterinary Medical Association Audiovisual Library
c/o Video Placement Worldwide
25 Second Street North
Saint Petersburg, FL 33701
Phone: (800) 266-6310

Catheterization Techniques — Venous and Arterial Video

Abstract:

Percutaneous catheterization technique is demonstrated on the canine cephalic vein, saphenous vein, jugular vein, femoral artery and anterior tibial artery. Surgical cutdowns are demonstrated on the jugular vein, femoral artery and carotid artery. The program emphasizes and demonstrates aseptic preparation of the catheterization site and maintenance procedures for indwelling catheters. Common problems regarding positioning and placement of indwelling catheters are also addressed.

Catalog No.: 3247-1

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Humane Handling and Laboratory Techniques for the Rat Video

Abstract:

This program provides instruction in the humane and effective handling of the rat. With practice, after viewing this tape, the viewer will be able to safely handle and restrain the rat, to pass a stomach tube, give injections, collect blood, and sex the animal.

Catalog No.: 3324-1

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Needle Techniques in Small Animal Medicine

Abstract:

This video demonstrates subcutaneous and intramuscular injection techniques, collection of blood from the cephalic vein, administration of fluids, and assisted restraint techniques for dogs and cats. Interaction with clients and assessment of animal temperament are discussed.

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Reptiles, Part II: Special Laboratory Techniques Video

Abstract:

This videotape reviews special techniques performed on reptiles in a laboratory environment. These include sexing, blood sampling, catheter placement, oral gavage, anesthesia and euthanasia.

Catalog No.: 3333-1

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Small Animal Bandaging Techniques Video

Abstract:

This videotape describes and illustrates proper application of bandages and casts commonly used for dogs and cats.

Catalog No.: 9859-1

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