

COOK[®]

VETERINARY PRODUCTS

VETERINARY OBSERVER

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VET BIOSIS™ UNIQUE BIO-MATERIAL FOR SMART TISSUE REMODELLING



Workshop participants practice suturing VET BIOSIS™ at the Royal Veterinary College, London.

Workshop at the Royal Veterinary College,
August 17-19th, 1998
London, United Kingdom

Medicine who had experience with SIS.



also be trimmed, folded, rolled and rehydrated before suturing into the particular tissue bed requiring tissue regeneration.

Associate Professor James Cook of the University of Missouri explained that VET BIOSIS™ acts as a scaffold and stimulant for tissue regeneration and differentiation (remodelling). Studies show SIS is angiogenic rendering the 'graft' surprisingly resistant to infection and that in 8-12

weeks it is almost entirely resorbed and replaced by similar tissue to the host. It is suggested that VET BIOSIS™ can be used to hasten and improve the outcome of surgical intervention for skin regeneration on degloved limbs, cleft palate repairs, periodontal treatment, adhesion barrier, vascular conduit, corneal

protection, bladder repairs and the list is growing daily.

An important message to clinicians was to continue to use standard wound management treatments with VET BIOSIS™ taking care not to disturb the wound for several days and if applied externally to protect the graft from being dislodged or drying out as you would any other graft.

The secondary objective was to encourage information exchange between practitioners and report their experiences to one another directly or through the COOK VETERINARY PRODUCTS VET BIOSIS™ clinical reporting program being implemented globally. ■

After several years of development the first seminar and hands-on demonstration of the revolutionary new surgical bio-material 'Sub Intestinal Submucosa' (SIS) was held in collaboration with the Royal Veterinary College and COOK VETERINARY PRODUCTS.

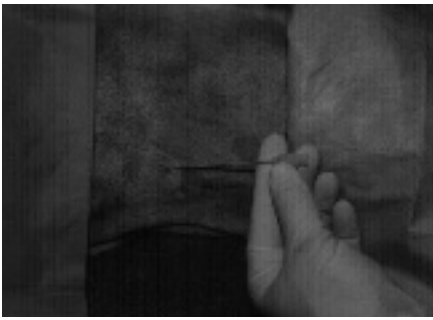
The speakers included research scientists from Cook Biotech Inc. USA and clinicians from the University of Missouri, Columbia USA and Lyon, France Departments of Veterinary

Delegates included clinicians from seven European countries. Their primary objective was to discover the scientific features and surgical applications for veterinary SIS available now as COOK VET BIOSIS™.

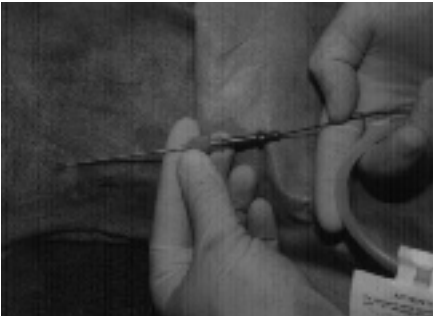
Areas covered in the workshop concluded that the product is of porcine origin and consists of a natural collagen matrix with its natural integral growth factors. It is prepared into 70 x 100 mm freeze dried sheets which can be stored at ambient room temperature. Being free of viruses, bacteria and all viable cells it makes a truly versatile surgical "aid" as it can

Catheterising animals

By *Andrea Battaglia-Lawrence*, COOK
VETERINARY PRODUCTS INC, USA



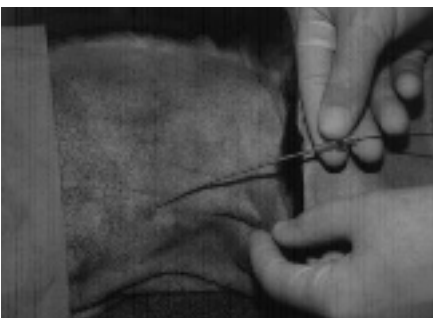
Seldinger Technique - Step 1



Seldinger Technique - Step 2



Seldinger Technique - Step 3



Seldinger Technique - Step 4



Seldinger Technique - Step 5

The needs of animals who commonly enter an emergency/critical care unit are very diverse. Not every animal will need the same type of intravenous catheter, not every animal will have the same veins accessible and not every animal will tolerate the same type of procedures. The veterinary staff need to become familiar with the various types and sizes of intravenous catheters available, the common access points on the animal and the various procedures of placing an intravenous catheter.

There are many types of catheters available to the user. They come in various lengths, gauges and materials. The variety provides the user with the ability to select the right type of catheter for the specific treatment protocol. A catheter in the jugular vessel would be preferred for an animal that required long-term intravenous drug and/or fluid therapy, multiple blood samples drawn or the measurement of central venous pressures. COOK VETERINARY PRODUCTS provides the user with numerous options. There are two types of placement techniques available with a variety of lengths and gauges of catheters. The option to custom design a catheter is also available.

The placement of a jugular catheter requires a team effort. The individual restraining the animal must be aware of how the positioning will affect the

angle of the placement of the needle into the vessel. The most common position to restrain the animal is in lateral recumbence. A rolled towel under the neck creates better access to the vessel on many patients. It is important to remember what works for one animal may not work for another. If the vessel can not be visualised and/or palpated, different positioning may be required. Vessels may be accessed easier on animals with thick necks, due to structure or obesity, by having them sit up. This is also the preferred positioning for those animals having respiratory complications.

Once the vessel is visualised and palpable, the site is prepped and the animal is properly restrained, the catheter can be placed. The **Seldinger Technique** (developed by Dr Seldinger, a radiologist, in the 1950s) is one type of procedure used for placing an intravenous catheter. The site is surgically prepped and draped. The individual placing the catheter needs to wear sterile surgical gloves and a gown to prevent contamination of the catheter.



Seldinger Technique - Step 6

Steps for the Seldinger Technique

Step 1. Insert needle into vessel. Be assertive!

Step 2. Straighten J-wire, using the adaptor, and insert into needle. *Stabilise needle with the other hand at all times to prevent it from dislodging.* Advance wire into vessel.

Step 3. Remove needle and wire cover. *The guide wire needs to be securely held, during the following procedures, to limit further advancement into the vessel.*

Step 4. Advance dilator, over the wire, 1-1.5 inches into insertion point and rotate back and forth. Remove dilator. This opens up the site to facilitate the introduction of the catheter.

Step 5. Advance catheter over the guide wire into the vessel.

Step 6. Remove guide wire, flush and secure catheter to animal with sutures. Apply triple antibiotic ointment at the insertion site. Wrap to provide additional stabilisation.

als for critical care

The other option is the use of the **Peel-Away® Sheath Needle**. The site is surgically prepped and draped. The individual placing the catheter wears sterile surgical gloves and a gown to prevent contamination of the catheter.

It is important to stabilise the catheter properly. Suturing the catheter in place or placing a piece of tape at the base of the catheter hub and gluing it to the skin are options. Use glue sparingly. The chemicals in the glue may cause skin irritation if the animal is sensitive to it. The catheter site can then be wrapped. The goals of the wrap are to provide additional stabilisation, maintain cleanliness of the site and to provide comfort for the animal. A pad with antibiotic ointment can be placed over the initial point of insertion. Cast padding is used to

secure the pad and cushion the neck. Rolled gauze is placed over the cast padding for additional support. Adhesive tape is the final covering. Periodically check to confirm the port remains open during the wrapping procedure. Occasionally the catheter can kink during these manipulations.

The catheter site needs to be checked daily for signs of irritation, swelling or leakage. These catheters can be manipulated for many days as long as proper handling techniques are used. If the catheter needs to be changed, the intravenous fluids and lines should be changed as well.

- This subject material is an excerpt from the future publication *Small Animal Emergency and Critical Care: A Manual for the Veterinary Technician*, © W.B. Saunders Co. ■

Steps for the Peel-Away® Technique

Step 1. After nicking the skin with a hypodermic needle to facilitate the introduction of the sheathed needle, insert needle and sheath unit into vessel 25% - 50%

Step 2. Advance sheath off needle into vessel.

Step 3. Feed catheter through sheath into vessel.

Step 4. Remove obturator and flush catheter with heparinised saline.

Step 5. Pull up and out on tabs to remove sheath.

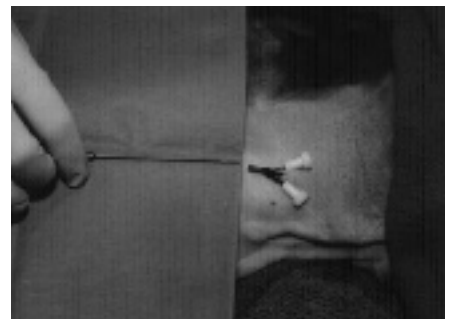
Step 6. Secure catheter to animal using sutures and apply triple antibiotic ointment at insertion site. Wrap for additional stabilisation.

Quick tips when utilising the Peel-Away® Technique for vascular access

1. Make a small nick incision at catheter placement site.
2. Before introducing the Peel-Away® Sheath Needle into the vessel, secure the sheath to prevent it from advancing prematurely. This can be done by holding it at the base of the sheath.
3. Insert Peel-Away® sheath needle through nick incision into vessel. Advance the unit into the vessel to insure that the sheath as well as the needle is seeded properly.
4. Stabilise the needle to prevent it from advancing or retracting.
5. Advance the Peel-Away® Sheath into the vessel by using a slight rotation, side to side, while advancing.
6. The needle can then be removed from the vessel, leaving the Peel-Away® Sheath as the introduction unit.
7. Introduce the intravenous catheter through the Peel-Away® into the vessel. Cap and flush the intravenous catheter with heparinised saline to prevent it from clotting.
8. Remove sheath by pulling the tabs up and out.



Peel-Away® Technique - Step 1



Peel-Away® Technique - Step 2



Peel-Away® Technique - Step 3



Peel-Away® Technique - Step 4



Peel-Away® Technique - Step 5

First Dutch critical care workshop attracts plenty of interest



By Ronald van de Boomen,
COOK VETERINARY PRODUCTS,
The Netherlands

The first Dutch COOK VETERINARY PRODUCTS workshop was held on February 21 at the Utrecht University. No less than 40 people had applied for the workshop, but only 20 could participate.

The workshop was led by Dr Joris Robben, who practices intensive care medicine at the university. The subjects covered were:

- intravenous infusion (with Peel-Away® technique);
- intraosseous infusion;
- thorax drains (pneumothorax/liquothorax); and
- nasal oxygen/feeding tube placement.

The group arrived at the university at 9am and enjoyed an early morning cup of coffee. Right after that began the theoretical part, in which Dr Robben explained in which cases it could be useful to place an intravenous catheter or an intraosseous needle. The morning session was mainly about fluid therapy.

After lunch, we divided the group in two so we could assist properly in the procedures which the vets were going to try out. Before each segment, Dr Robben showed a part of his own video in which he demonstrates COOK products. We began with the



Dr Robben demonstrates the Peel-Away® technique at the Dutch critical care workshop held at the Utrecht University in February.

Peel-Away® technique. Because there were 11 beagles available, everyone got the chance to place a Peel-Away® sheath catheter. Most of the people succeeded in this, making them very enthusiastic about the technique.

In addition, everyone who participated received a copy of the COOK VETERINARY PRODUCTS critical care video (VHS-VP3), so they can all revisit the course material on their own. ■

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