

The importance of sterilisation in minimising cross infection risks in Veterinary practice.

Nicki Glen, BA Hons., VN., MCIM., F Inst SM January 2012

At a time when relationships are crucial to customer retention, it is essential that veterinary practices exercise the highest level of care for their clients' best friend and adopted family member - their pet. It is equally important that they communicate this commitment.

It has long been known that pets are considered to be a member of the family and may be valued as children within this unit. "The human-animal bond has definitely become stronger and more apparent," says Dr Crist. "Society is experiencing more legal issues with pets, such as pets having guardians, becoming heirs to large family fortunes, or becoming disputed over in divorces. People want to make sure their pets are provided for in the event of their deaths."¹

Owners expect the same care from vets as from their family doctor and hospitals. When there is a need for hospitalisation and surgical procedures, diligent vets and nurses will understand that this is one of the most stressful times for an owner. Some people experience shock, disbelief, confusion, fear, sadness, anger, guilt, or helplessness. These emotions are normal and understandable responses to the realisation that a special friend is ill.²

As with a hospital visit, there is the fear of cross infection: the risk of contracting additional infections or diseases which exacerbate the primary health problem. Professor Dinah Gould observes that patients frequently voice fears about coming into hospital to have a minor operation and leaving with a serious infection.³

The increase in awareness that veterinary practices, like hospitals, may harbour transferable infections and diseases, is a concern for owners. These are regularly expressed on pet forums.^{4,5} One owner who suffered the devastating loss of her dog Bella to MRSA has become a leader in educating owners and vets, reinforcing the need for practices to improve hygiene and cleaning standards to minimise the possibility of cross infection. Further information on the control of resistant bacteria can be found on www.thebellamosfoundation.com/

The health and hygiene requirements of the Veterinary Hospitals Association in regard to theatre cleanliness, form part of the core standards which they present as relevant to all veterinary practices. They reflect the mainly legal requirements which must be met in running a veterinary practice, together with guidance set out in the RCVS Guide to Professional Conduct. For example, the induction area can also serve as the operating area, providing surgical cleanliness/sterility is not compromised and is appropriate for the procedure undertaken.⁶ The practice must provide an autoclave, vacuum or non-vacuum or other recognised sterilisation systems, for the effective sterilisation of instruments and equipment⁷. However, auditing of the standard of hospital procedures, though encouraged, is not mandatory for veterinary hospitals in certain countries for example the UK.

Consider for a moment the one procedure which, by the nature of the materials traditionally used in the required device, has not been able to withstand optimum sterilisation in an autoclave as with surgical instruments - the introduction of an endotracheal tube. Although many practices use disposable tubes, in reality how many times is each tube reused?

If this was the case in human surgery what would be the impact? There are numerous articles which reference cross-infection during the process of intubation, suggesting that oral endotracheal intubation and extubation are two routine procedures performed by anaesthesia providers which could lead to breaches of mucosal integrity and to slight or moderate bleeding. This may provide a vector for the transmission of blood-borne disease.⁸ When cross infections are identified in hospitals, wards are closed. Sometimes the whole hospital may be closed until a thorough audit of events has been undertaken and the source of infection identified. A deep clean process is then undertaken and new or upgraded processes are put in

place to ensure the same source of cross infection does not recur.

The new v-gel[®] supraglottic airway device offers a solution. In addition to its ease of use and anatomically beneficial design, it makes the autoclave sterilisation of an airway device possible for the first time. This gives the practice and the owner the reassurance that everything possible has been done to limit the risk of cross infection.

Ref 1 Pet Talk Dr. M. A. Crist, clinical assistant professor at the Texas A&M College of Veterinary Medicine & Biomedical Sciences

Published on May 2, 2011 by Stanley Coren, Ph.D., F.R.S.C. in Canine Corner

Ref 2 Colorado State University Veterinary Teaching Hospital

Ref 3 First rate hygiene is vital to prevent infections in hospital- Author Dinah Gould, Professor, the City University of London

Ref 4 <http://answers.yahoo.com/question/index?qid=20110621123949AAuB6kZ>

Ref 5 <http://en.allexperts.com/q/Alternative-Medicine-Pets-3721/2012/2/dog-mrsa.htm>

Ref 6 **5.6** Area used for the conduct of surgical procedures (BP)

Ref 7 **5.12** The practice must have disinfection and/or sterilisation facilities suitable for the work undertaken (GtPC/ BP)

Ref 8 AANA J. 1992 Aug;60(4):379-83. A descriptive study of blood in the mouth following routine oral endotracheal intubation.

Chrisco JA, DeVane G.