

Keep It Sterile



Post-operative infection is a concern for all veterinary surgeons and is a risk of any surgical procedure. Thanks to modern surgical practices, the prevalence of post-operative infections has decreased, however post-operative infections, whether fatal or not, can be financially and emotionally challenging for clients, veterinarians and veterinary staff. Because of this, it is important that veterinary staff be trained properly in aseptic technique.

Prevention of surgical site infection is an important objective in every surgical facility; however complete eradication of post-operative infection is not a realistic goal. Some risk factors are more able to be controlled than others. For the purpose of this article, we will focus on those risk factors of which we have more control over. Those risk factors include pre-operative care, surgical environment and post-operative care. Below is a brief overview of aspects to consider when developing your own infection control program.

Every hospital should have an infection control program, which should be implemented and controlled by an appointed veterinarian or veterinary technician. This person should be responsible for training new staff and ensuring that existing staff follow the developed strategies for prevention of infection. Post-operative sites should be closely monitored both during the patient's hospitalization as well as at follow up visits after discharge. Occurrences of infection should be recorded and monitored as well as communicated to the surgical staff and surgeon.

Pre-operative preparation is an important first step in minimizing surgical site infection rates. Patients with soiled coats may need to be bathed to prevent contamination. Patients should be shaved outside of the operating room using high quality clippers and, preferably, sterilized clipper blades. Clipping should also ideally be done after induction rather than before and the skin prepped with scrub and sterile gauze. Any staff involved in direct contact with the sterile field should clean under their fingernails and use a hydro-alcoholic scrub prior to donning sterile surgical gloves, gown, cap and mask. The operating room should be exposed to limited amounts of traffic and those allowed into the operating room during procedures should also be limited to essential personnel avoid contamination.

Sterile goods should be stored according to the manufacturer's recommendations and packages should be examined prior to use. Packages should be free from defects and handled carefully to avoid dragging, crushing or puncturing of the sterile package. Expiration dates should be routinely examined and productions should be rotated appropriately. Some reusable items, such as gowns or shrouds have a usage grid that should be marked after each use. Once the grid has been filled, the item should be discarded and a new item placed into the surgical rotation. Dragging suture, especially braided suture, across the skin or table should be avoided.

Securos[®] University AmerisourceBergen

Decontamination and sterilization of surgical instruments is critical in the prevention of surgical site infections. Equipment, including surgical lights, should be cleaned and disinfected regularly and, in the case of surgical instruments, sterilized after each procedure. All instruments should be manually washed within ten minutes of the completion of each surgical procedure. If that is not possible, the instruments should be sprayed with an enzymatic cleaner and kept covered with a moist towel until they are able to be cleaned. Once they are able to be cleaned, the instruments should be moved to an area of the hospital designated for this purpose. Instruments should be thoroughly cleaned using a neutral pH cleaner made specifically for instruments. Care should be taken to remove all tissue, blood and other bio-burdens from the instruments. Ultrasonic cleaners are growing in popularity as they are able to clean the instruments significantly better than manual cleaning alone. If available, the instruments should be placed with box locks open in an ultrasonic cleaner, using care not to overload the cleaner. Ultrasonic cleaner solution should be changed daily at a minimum. After lubrication and drying, the instruments may be wrapped in either a re-usable or disposable pack wrapper and sterilized. Autoclave indicator strips should be used for each pack and biological indicators should be used periodically to demonstrate the efficacy of the autoclave. Autoclaves should also be properly serviced and maintained to ensure proper functionality. Flash sterilization should only be used in emergency situations (but never on surgical implants) and cold sterilization should be avoided altogether.

Post-operatively, direct contact between the surgical site and bare hands should be avoided. Bandages may be used as required and should be changed by a veterinarian or veterinary technician trained in aseptic techniques. Consequently, pet owners should also be educated on how to properly manage the surgical site and what signs may indicate a surgical site infection.

Overall, good sterile processes and techniques should be adhered to as vigilantly as possible. The extra effort to follow these on a daily basis can make a difference in a surgical outcome and a patient's health.

Securos Surgical Sterile Products

Suture Line



Instrument Cleaners



Arbutus DrillCover[™] System

