HOW TO MAKE YOURSELF INDISPENSABLE AS A SURGICAL ASSISTANT

General Considerations

The success of an orthopedic surgeon largely depends on development of a good surgical team. The surgical assistant is critical part of this team and to a successful outcome in dogs and cats requiring orthopedic surgery. The surgical assistant can be a licensed veterinary technician or a well-trained veterinary assistant. The roles of the assistant that make them indispensable include preoperative management of the operating room and patient, providing assistance to the surgeon during the surgical procedure, maintaining an organized and orderly instrument table and management of the patient during the postoperative period.

A surgical assistant is highly recommended and may be essential for many orthopedic surgeries in dogs and cats. This is particularly true for patients treated arthroscopically due to the need for frequent manipulation of the limb and assistance handling instruments during operative arthroscopy. A properly trained scrubbed assistant will not only reduce surgical time, but will also improve surgical results. The difference between a miserable surgical experience and a feeling of exuberance often lies in the hands of the scrubbed assistant. The surgical assistant should make an effort to understand the procedure to be performed and offer suggestions when appropriate. Experienced surgical assistants will often prevent surgical mistakes by the surgeon.

Before the Start of Surgery

Prior to surgery, the surgical assistant should position the patient appropriately for the intended procedure. Ask the surgeon about the intended surgical approach. If a fracture is to be repaired, ask the surgeon if a bone graft will be needed. Do not forget to prepare the graft site and position the animal appropriately so that the graft can be harvested. If more than one procedure is to be performed, discuss patient positioning and whether the procedures will be performed with the initial draping or require a second draping. Ask the surgeon about the need for local anesthetics, including joint blocks,nerve blocks and epidurals. The instrument table should be positioned in a functional location to allow a more efficient surgery. Placement of the table over the animal is often used for hind limb procedures. Placement of the table behind the patient is typically used for forelimb procedures. The surgeon should be asked whether they prefer the affected leg to be prepped with a hanging leg prep. This may require a larger clip prior to surgery. Some surgeons prefer to leave the leg hanging for certain fractures. Other surgeons prefer to have the leg hang off the end or side of the table. Positioning the patient with the use of a vacuum bean bag helps to maintain proper patient position and secures the patient when manipulating the limb during surgery. This is particularly useful for joint replacement surgery and arthroscopy. Various limb braces can also be used to optimally position and secure the leg, making the surgical procedure easier. Aseptic draping technique is essential. The virulence of bacteria has increased. Infection with resistant bacterial strains has become an unwanted challenge for orthopedic surgeons following surgery. The surgical assistant should be cognizant of the need for strict asepsis and act as the asepsis police in the OR. Be sure and ask the surgeon about the preferred method of prepping and draping the patient. Don't be afraid to make suggestions if you are concerned about a potential for contamination. The assistant should have all the necessary equipment and implants ready and organized for the surgeon. This may include a general surgical pack, an orthopedic pack and miscellaneous specialized instruments. The experienced surgical assistant will typically know the type of implant the surgeon is likely to sue for a particular procedure, but the surgeon should always be asked what they need prior to starting the procedure. It is rare that my surgical assistant has not chosen the implant I intend to use. In fact, if I ask for a different implant than what my assistant pulled out, I always

reconsider. Proper planning before surgery avoids long delays during surgery or discovering a missing item during the surgical procedure. The surgical assistant has an expanded role in the past 5 years. Many surgeons have begun to perform minimally-invasive surgery. This type of surgical technique typically mandates having an experienced, trained assistant due to the increased technical demands of these procedures. The assistant places a crucial role in the set-up and preparation for an arthroscopic procedure. It is important to have a trained assistant for these types of procedures due to the technical nature of the equipment and increased preparation time required. An experienced surgical assistant should be able to prepare the operating room and patient for an arthroscopic procedure in less than 30 minutes.

During Surgery

During surgery, the surgical assistant plays a very important role in orthopedic surgery:

1. Keep instrument table neat and clean.
2. Assist the surgeon with surgery and anticipate the needs of the surgeon.
3. Assist the surgeon with hemostasis.
4. Retract tissues as needed.
5. Lavage tissues adequately- no not let them dry out!
6. Position and manipulate the limb as required for exposure or fracture reduction.
7. Alert the surgeon to any potential probelms..
8. Anticipate the need for instrumentation and have them ready for the surgeon.
9. Be willing to accept blame for the surgeons inadequacies? Just kidding!!

During surgery, the surgical assistant plays a very important role in arthroscopy:

10. Control fluid flow into and out of the joint.
11. Monitor the limb for extravasation and alert the surgeon if seen.
12. Flex and extend the joint as needed to allow proper positioning of the arthroscope.
13. Assist in holding the camera or hand instruments as needed.
14. Manipulate the joint to allow a better view of the target tissue
15. Shoulder, Elbow, and Tarsal arthroscopy requires an experienced assistant to properly position the limb to allow adequate visualization and access .

After Surgery

1. Apply bandages to the patient as needed.
2. Obtain postoperative radiographs as needed. Be sure and protect your patient from overzealous personnel that may accidentally damage a repaired joint or delicate fracture.
3. Administer adequate postoperative analgesics as directed by the surgeon.
4. Recover the patient in an area that is quiet and appropriate.
5. Apply cold therapy as directed by the surgeon.

**Source: ACVS Symposium Technicians Seminar 2010 Brian Beale DVM, DACVS Gulf Coast Veterinary Specialists Houston, TX