Pre-operative Management

**Pre-operative Plan**

* Before beginning a surgical procedure there should be a meeting of the surgical team to develop a surgical plan. This will increase the efficiency of the surgery.
* Regardless of the nature of the surgery, the surgical plan should identify: personnel involved, their roles and training, type of operative procedure, equipment and supplies needed, identify location of operating room, preoperative health assessment, intra-operative monitoring, operative technique, post-operative care, need for antibiotics, and a mechanism for keeping all relevant records.
* Perform a physical examination to determine if the animal is healthy (ASA Classification). If possible perform a complete blood count, blood chemistry and urine analysis. Obtain the weight, age, sex, colony history, and health status.
* Stabilize animal if needed. Pre-existing conditions such as dehydration that can have an effect on anesthesia should be corrected first.
* Determine if the animal requires sedation before anesthesia, e.g. aggressive bulls.
* Assess all possible complications and have a plan in place minimize each, e.g., Anesthesia can induce regurgitation in ruminants. This risk can be minimized by adequate fasting and passing a stomach tube to allow drainage of ruminal materials.
* Procedures lasting more than 90 minutes require antibiotics.
* It is easier to treat pain BEFORE it occurs than after.
* Ensure all dosage calculations and drug volumes are correct.
* Ensure all emergency equipment is present and in working order.
* Have a backup plan for your back up plan.
* Determine the lethal dose of the drug to avoid overdose especially when working with drugs such as Lidocaine with narrow therapeutic indices.

**Considerations**

* Assume the animal is in pain if you would be in a similar circumstance.
* Minimize risk of infection by maintaining sterile conditions if possible.
* Inform the owner of the risk of complications and adverse effects associated with sedation and anesthesia.
* Have the owner sign a consent form indicating that possible consequences have been explained.
* Consider the cost, adverse effects and withdrawal times of all drugs used and make the best choice.

**Monitoring**

* Ensure that anesthesia has taken effect before beginning.
* Ensure respiratory and heart rate are not too low or high (sign of toxicity)