**Post-op Care**

* **During post-op care the veterinarian should educate the handlers and farmers on what they need to do during the recovery period and why they need to do it.** This is of utmost importance as they will be the ones with full access to care for the animals. The veterinarian should communicate well and often enough with the farmer/handlers to help ensure compliance with post-op guidelines.
* If the amputation site is near the joint and skin salvage is not enough to close the incision then the wound will heal by second intention. Bleeding is more important if amputation is through the diaphysis. Hemorrhage is better controlled if a flap of muscle/skin covers the extremity of the bone when possible. Large vessels are ligated. Tourniquet is removed to ensure adequate hemostasis. Interrupted sutures are often used to close the wound after amputations. Tension sutures are not necessary if the flap is adequate. The stump is covered by a thick bandage to prevent any trauma to the suture line when the animal will stand.
* The animal should be housed on a flat surface rather than rough surfaces which are more likely to come into contact with the healing surface and cause [pain](http://wildpro.twycrosszoo.org/S/00Ref/KeywordsContents/p/pain.htm). The environment shout also be clean and shady and comfortable.
* **For animal welfare purposes, the animal should be carried to the recovery area and shouldn’t be allowed to bear weight on the amputated limb immediately after surgery and several hours following.**
* The bandage should be removed or changed in about 1 week if there was no need for maintaining drainage of septic regions proximal to the incision. If a tendon resection is performed the bandage should be removed in 2 or 3 days. Depending on the environment the cow must live in after surgery either no bandage is placed after the first one is removed or a light wrap to minimize painful contact with environmental objects. Parenteral antibiotics are usually given for 5 days and NSAID pain killers given for 3 days post op.
* Post-operative care should be given for a long time as the amputee will need more care than other herd animals for the rest of its life. The animal will recover slowly and will slowly begin to bear weight on the limb.
* After the wound has healed. A piece of board may be placed on the side of the amputated digit to add support and to act as a prosthetic hoof. This will allow a proportionate amount of weight bearing on each hoof.
* Cattle undergoing amputation of a rear medial digit are more likely to recover well than those undergoing amputation of either front digit. A rear lateral digit amputation is associated with the poorest recovery, possibly because of the disproportionate amount of stress placed on this digit.

**Possible Complications**

* Heart complications – such as [heart attack](http://www.nhs.uk/conditions/heart-attack/Pages/Introduction.aspx)
* [Blood clots](http://www.nhs.uk/Conditions/Thrombosis/Pages/Introduction.aspx) (venous thrombosis)
* Slow wound healing and wound infection
* [Pneumonia](http://www.nhs.uk/conditions/Pneumonia/Pages/Introduction.aspx) (infection of the lungs)
* Stump and "phantom limb" pain: Phantom limb sensations are when an animal experiences sensations that seem to be coming from the limb that has been amputated. Sometimes this is just awareness of the limb, but it can occasionally be painful. This is known as phantom limb pain.
* Psychological problems such as depression.
* Digit amputation generally results in earlier culling of cattle.
* Digit amputation is not suitable for individuals in which both digits of the same foot are affected, in very heavy animals) since breakdown of the remaining digit is likely) or for sepsis of the fetlock joint.
* Digit amputation results in a persistently poor gait in some animals and is not suitable for all cases.
* Digit amputation in cattle generally results in a shorter productive life and a poor cosmetic result; heavy individuals generally do poorly following digit amputation and walking on hilly or rocky ground, or slatted floors, is more difficult for individuals with an amputated digit.
* Arthrodesis is more expensive and technically difficult than amputation; it also requires more postoperative care and a longer time is required for return to previous production levels.
* Xylazine related complications include:

Excess salivation, reduced reticuloruminal activity, reduced cardiac sphincter tone, reduced swallowing and reduced laryngeal activity. These increase the risk of aspiration pneumonia from the inhalation of either saliva or rumen contents.

**Client Education**

It is important to:

* Inform the client of any complications or side effects that may occur due to procedures.
* Inform the client if there are any drugs needed to be given to the patient after the procedure and the reason for use of each drug and common side effects that may occur.
* Inform the client of the dosage regimen of any drugs needed.
* Inform the client to keep the patient as comfortable as possible
* Inform the client of expected recovery time
* Exchange contact information.

Where food animal patients are involved it is important to inform the client when the animals can be used as a source of food based on the withdrawal intervals of drugs used during pre-op, intra-op and post-op.