MAMMARY SURGERY

Post Operative Measures



Signalment: 20-month-old 400 kg intact Dairy Cow

Post Operative Medications:

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| Drug | Dose | Frequency | **Withdrawal Time** | Indicated Use |
| Flunixin | 2.2mg/kg = (2.2x 400 / 50) =17.6ml | Should be continued for at least 24-48 hours. | 4 Days | NSAID In Pain management and relief. |
| PenStrep long acting | 20,000IU/ kg = (20000x 400/ 200,000) = 40ml | Should be continued for AT LEAST 3 days in all cases.Aseptic intramammary infusions may be supplemented. | Meat: 30 daysMilk: 5 days | In infections or extended contaminated open surgeries to reduce infection risks post op. |

What are some of the Post Operative complications of Mammary Surgery?

* Mastitis
* Partial or Complete Dehiscence
* Fibrosis of the Teat
* Fistula Formation
* Suture Tract Infections
* Excessive Teat Swelling
* Mural Abscesses

Management

* Ensure that the animal is housed in proper conditions, in a clean, cool, and dry environment to reduce stress and promote recovery.
* Cow udder harness can be used to isolate the udder from the environment.
* The surgical wound should be monitored and cleaned using aseptic solution and kept dry. The wound is checked regularly to determine if the wound is healing properly and there are no signs of infection.
* Allow for passive milk drainage for (5)-10 days post operation.
* The frequency of passive milk drainage depends on the milk yield.
* Practice antimicrobial prophylaxis every second interval of passive milk drainage
* Removal of skin sutures and cannula at day 11
* Milking via machinery can be attempted and tested at day (6)-11
* Sutures to be removed (if any) within 10-14 days after the procedure to prevent the formation of a fistula
* Severe post op edema can be treated by applying crushed ice around the teat for several times during the day. Each application session should be 20 minutes long.

Milking

* Hand milking should not be done for 10 days. Tell the farmer that hand milking will create uneven external pressure, increasing pressure in the teat cistern which may force milk to dissect through the teat closure which can allow reopening of the streak canal. Increases the risk of teat fistulas.
* Mastitis Ointments can be used. They should be used on lactating cows. Avoid the use in dry cows, as the gland cannot be milked afterwards.
* READ LABEL ON MASTITIS OINTMENTS TO DIFFER
* A teat cannula with a lid may be left within the teat in cases where the streak canal was compromised during laceration.
* Do post milking teat dips
* Avoid overmilking
* If machine is used, its use can be warranted even a day after surgery. Take note to use a large diameter teat cup to avoid further inflammation

Client Information

* Communicate with the client to LIMIT THE ANIMAL’S ACTIVITY and to keep the animal in an environment where their movement will be minimal. The client should be reminded of the importance of this measure to prevent reopening the wound.
* Ensure Proper upkeep of pens and pastures, the farmer should clear any protruding wires or fences, tools or any sharp surfaces that may reopen the wound or create new ones. This will play a role in the animals healing and reducing the occurrence of secondary infections.

Suture Removal

* Remove any non-absorbable skin sutures 8 days post operatively to reduce the incidence of fibrosis formation.

Nutrition

* . • Dry cows: Feed 1000 IU vitamin E per head per day (when not on green pasture) and 3 mg selenium per head per day; also inject 50 mg selenium 21 days prior to parturition.
* • Lactating cows: Feed 400-600 IU vitamin E per head per day and 6mg selenium/ head/day
* Ascorbic acid was administered to 8 cows with acute mastitis resulting in an increase in milk output. The researchers concluded that ascorbic acid could be beneficial to cows with mammary infection

Prognosis

* For return to normal milking at 6 months after reconstruction: 75%
* Significant negative impact on outcome:

 Interval between trauma and repair > 24 hours

Mastitis present at time of repair

Costs

Prices for different procedures vary from practice to practice and country to country. A solid rule of thumb for a veterinarian in determining the price of a procedure and the many aspects that surround it is as follows.

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| Direct staff costs: |   |
| Veterinarian — x PRICE per hour (cost to practice) |  |
| Nurse — x PRICE per hour |  |
| Direct equipment costs: |   |
| Surgical pack (sutures, bandages, syringes, catheter) |  |
| Anaesthesia: |  |
| Direct equipment costs: |   |
| Surgical equipment per procedure (including instruments) |  |
| Share of practice overheads (per procedure) |  |
| Hospitalisation (1/2 day) |  |
| Total cost: |  |

As a veterinarian, IT IS IMPORTANT TO NOTE:

* Clients demand fairness, transparency, and clarity of pricing and if they experience a lack of these, are more likely to seek them elsewhere.
* The practice's pricing strategy must not undersell the service or the products, but at the same time, must not open the practice up to accusations of profiteering or taking advantage.
* A rational pricing strategy must achieve four key aims: it must cover the practice's costs, provide an adequate return on the owner's investment, allow reinvestment for practice growth and be fair to clients.
* One of the most important determinants of setting fees is the client's perception of value.
* Receptionists, nurses and veterinarians should all be able to explain, on request, what the charges are for and why they are included, which requires regular staff training in understanding the practice's prices, the overall pricing strategy and structure.

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| **Standard Consent Form**(Hospital Letterhead)

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| Owner's Name: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
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| Patient's Name: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
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| Date of Birth: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| I am the owner or the agent for the owner of the animal described above, and I have the authority to execute this consent.I have also been informed that there are certain risks and complications associated with any operation or procedure of this type. They have been explained to me as well. I further understand that during the course of the operations or procedures, unforeseen conditions may arise that may necessitate the performance of additional procedures.I authorize the use of appropriate anaesthesia and pain relief medication as needed before or after the procedure. I have been informed that there are risks associated with the use of any medication.I understand the hospital support personnel will be used as deemed necessary by the veterinarian.Signed:    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |