



PRE-OPERATIVE CARE DONE  
FOR THE EXPLORATORY  
LAPAROTOMY PERFORMED  
ON RIHANNA THE SHEEP

# Pre Operative Care

## Pre-Surgical Planning:

Pre-surgery Examination

Fasting

Set-up of prep area and operating room

Aseptic Preparation

Analgesic Regimen

Anesthesia

Aseptic Transfer to Surgical Field

# Pre-surgery Examination

## Examination included:

### Physical examination:

Animal identification was re-checked and confirmed. Temperature, HR, CRT, RR and BW are recorded pre-surgery.

Her pen area was checked for signs of loose stool or vomiting, of which there was none.

She was observed in her pen, was BAR, and exhibited normal behaviour.

Finally, her animal medical record was reviewed.

# RIHANNA'S PRE-ANAESTHETIC EXAM INFORMATION:

ASA GRADE	WEIGHT (KG)	TEMPERATURE (°C)	PULSE RATE (BEATS/MIN)	RESP. RATE (BREATHS /MIN)	CRT (SECONDS)
1	30.4	37.3 (NORMAL: 38.8-39.8)	84 (NORMAL: 70-90)	52 (NORMAL: 12-30)	Less than 2 (NORMAL: 1.5-2)

# Pre-surgical Fasting

## **Rodents & Rabbits (mice, rats, guinea pigs, hamsters, rabbits):**

High metabolic rate

No fasting prior to surgery

Rodents DO NOT have vomit reflex, no regurgitation

## **Monogastric animals (e.g. dogs, cats, swine):**

Fast 6-24 hours prior to surgery

## **Ruminants (e.g. sheep, goats, cattle)**

Fast for 12-36 hours prior to surgery.

Reduces fermentation in the rumen

Placing stomach tube reduces rumenal tympany.

All animals should have free access to water.

Restricting water results in dehydration and more difficult anesthesia.

# Set-up of Prep Area and OR

## **Ensure prep area has:**

Functioning anesthesia machine (if required)

Stethoscope

Appropriate drugs and reversal agents (analgesics and anesthetics)

Functioning monitoring equipment

Prep supplies and clippers

## **Ensure OR area has:**

Functioning anesthesia machine (with ventilator)

Functioning monitoring equipment

Fluid support as needed

Emergency supplies (Ambu bag, and crash cart supplies)

# OR Set Up



## RECOMMENDED HARD SURFACE DISINFECTANTS

(e.g., table tops, equipment)

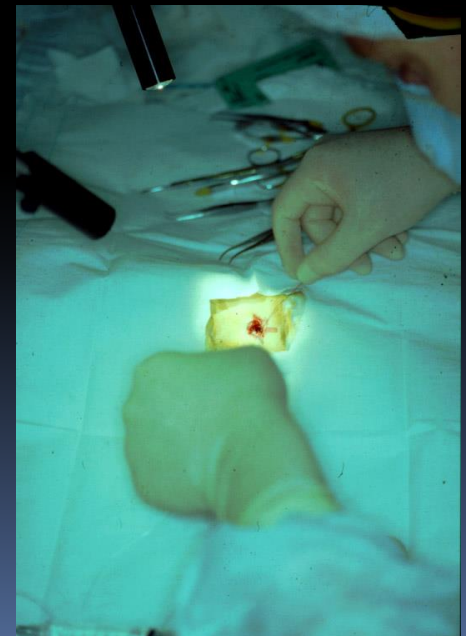
Always follow manufacturer's instructions for dilution and expiration periods

AGENT	EXAMPLES*	COMMENTS
Alcohols	70% ethyl alcohol 85% isopropyl alcohol	Contact time required is 15 minutes. Contaminated surfaces take longer to disinfect. Remove gross contamination before using. Inexpensive
Quaternary Ammonium	Sodium hypochlorite (Clorox® 10% solution) Chlorine dioxide (Clidox®, Alcide®, MB-10®)	Corrosive. Presence of organic matter reduces activity. Chlorine dioxide must be fresh; kills vegetative organisms within 3 minutes of contact.
Glutaraldehydes	Glutaraldehydes (Cidex®, Cetylcide®, Cide Wipes®)	Rapidly disinfects surfaces
Chlorhexidine	Nolvasan®, Hibiclens®	.Presence of blood does not interfere with activity. Rapidly bactericidal and persistent. Effective against many viruses.



# Aseptic Technique

- Preparation of the patient
  - Rihanna's entire right side was firstly washed with water to remove excessive dirt.
    - ❖ Remove hair from the surgery site, on the right flank, using clippers
    - ❖ initial or preparative scrub
      - Chlorhexidine followed by saline rinse, using gauze.
    - ❖ move to surgical room / area
    - ❖ final surgical scrub/paint
      - Povidone-iodine followed by alcohol rinse
      - Chlorhexidine followed by saline rinse
      - Duraprep®, Chloraprep®
    - ❖ sterile draping of surgical site
      - ✓ establish a sterile field



## RECOMMENDED SKIN DISINFECTANTS

Alternating disinfectants is more effective than using a single agent.

AGENT	EXAMPLES*	COMMENTS
Iodophors	Betadine®, Prepodyne®, Wescodyn®	Reduced activity in presence of organic matter. Wide range of micobicial action Works best in pH 6-7
Chlorhexadine	Nolvasan®, Hibiclens®	Presence of blood does not interfere with activity. Rapidly bactericidal and persistent. Effective against many viruses. Excellent for use on the skin.

# References

- NIH website <http://oacu.od.nih.gov/ARAC/surguide.pdf>
- Duke University Animal Care and Use Program  
[http://vetmed.duhs.duke.edu/guidelines\\_for\\_general\\_surgery\\_in\\_animals.htm](http://vetmed.duhs.duke.edu/guidelines_for_general_surgery_in_animals.htm)
- Doctors Foster and Smith Website  
<http://www.peteducation.com/article.cfm?c=0+1302+1478&aid=977>
- [http://www.ruralareavet.org/PDF/Anesthesia-patient\\_Monitoring.pdf](http://www.ruralareavet.org/PDF/Anesthesia-patient_Monitoring.pdf)