

Surgery steps checklist

01-05-2018

Week before surgery

- Sign out the surgery room and any other equipment you need
- Order all supplies and equipment well in advance

Day(s) before surgery

- Prepare the instrument pack
- Up to 5 animals per pack, always add extra supplies just in case
- Instruments, swabs, drapes, indicator strip, gauze
- Wrap and tape with the date
- Autoclave the pack
- Good for 6 months then re-autoclave if still dry and intact
- Wrap or sleeve options for pack outer
- Autoclave must be certified every 3 months
- BT Sure Form available with instructions, use BT Sure spore killing test
- DLAR provides BT Sure

Day of surgery

- Prepare 4 areas: animal prep, surgeon prep, surgical area, recovery

Surgeon prep:

- PPE
- Surgical gloves
- Hand soap and towels

Animal prep

- Shave station
- Scrub station:
 1. Chlorhexidine Solution or Betadine scrub
 2. Alcohol
 3. Chlorhexidine Solution or Betadine solution
- Saline
- Analgesia
- Syringes/needles
- Eye lube
- Heat source
 - Bubble wrap or Styrofoam OK for short procedure
 - Gel pack microwave—confirm it's not too hot
 - No electric heating pads!

Surgical area

- Heat source = warm water circulator
 - Bubble wrap or Styrofoam OK for short procedure
 - Gel pack microwave—confirm it's not too hot
 - No electric heating pads!
- Alcohol to clean instruments prior to bead sterilizer
- Temperature probe clean with alcohol pad, lubricate

Recovery:

- Clean cages—bottoms only = OK, you can reuse wire lid, filter top
- Heat source

Incubator ideal

Warm water circulator under cage next best

Possibly heat lamp on a portion of the cage with close supervision

No electric heating pads!

- Put liner/paper towel on top of bedding
- Boost or Hydrogel
- Post op cage card

Immediately before starting surgery

- Turn on warm water circulating pump/blanket
- Turn on bead sterilizer
- Prep isoflurane vaporizer--Wear a mask
- Turn on O2 tank
- O2 set to 0.5-1 L/min
- Open prep solution tubes and swabs

- Cap mask gown—everyone in the suite
- Weigh the mouse/rat and document
- Calculate analgesic
 - Meloxicam 5 mg/kg SQ SID
 - Buprenorphine 0.5-1 mg/kg SQ BID for a mouse; 0.01-0.05 mg/kg SQ BID for rat
- Draw up analgesic
- Draw up saline: 0.25-0.5cc for mouse, 1-5 ml for rat
- Put syringes under heat source to keep warm
- Open surgery pack
- Open gown glove pack and towels

When ready to do the surgery

- Induction
- Give SQ saline
- Give analgesia
- Eye ointment via gloved finger or swab—do not contaminate the tip of the Puralube tube
- Shave
- Tape to remove excess hair
- Skin prep betadine scrub + alcohol x 3 rounds, finish with betadine solution—do not over saturate!
 - Pattern incision site outward concentric circles—do not back track!
- Confirm depth of anesthesia—firm toe or tail pinch, watch for breathing change or twitch
- Move patient to surgery area—carefully do not contaminate scrubbed skin
- Temperature probe lubricate, insert, tape to tail

- Wash hands, dry with towel
- Glove
- Maintain sterile field
- Cut drape
- Perform surgery

- If doing multiple animals, between each animal
- Remove gross debris on instruments with brush/gauze and alcohol
- Tips in bead sterilizer 15 seconds, use sterile gauze to remove if hot
- Change gloves if contaminated
- Use new surgical instrument pack / freshly

Recovery

- Turn off anesthetic
- Clean and dry fur
- Remove temp probe
- Place animal in recovery cage on heating pad/incubator
- Post-op monitoring:
 - BID (twice daily) x 3 days
 - SID (once daily) x 4 days
 - Weekly for life
- Remove sutures or wound clips at 10-14 days
- If animal dies, label bag and necropsy request form

Clean up

- Turn off gas, oxygen tank, weigh and record weight of F/air canisters, discard after 50g weight gain
- Clippers brush to clean, spray with cleaner/lubricant while on
- Bloody items and tissue in red waste bin in 091