

Surgery steps checklist

01-05-2018

Week before surgery

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

Day(s) before surgery

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

Day of surgery

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

Surgeon prep:

- o PPE
- o Surgical gloves
- o Hand soap and towels

Animal prep

- o Shave station
- o Scrub station:
 1. Chlorhexidine Solution or Betadine scrub
 2. Alcohol
 3. Chlorhexidine Solution or Betadine solution
- o Saline
- o Analgesia
- o Syringes/needles
- o Eye lube
- o 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

- o 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!
- o Alcohol to clean instruments prior to bead sterilizer
- o Temperature probe clean with alcohol pad, lubricate

Recovery:

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

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

Immediately before starting surgery

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

- o Cap mask gown—everyone in the suite
- o Weigh the mouse/rat and document
- o 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
- o Draw up analgesic
- o Draw up saline: 0.25-0.5cc for mouse, 1-5 ml for rat
- o Put syringes under heat source to keep warm
- o Open surgery pack
- o Open gown glove pack and towels

When ready to do the surgery

- o Induction
- o Give SQ saline
- o Give analgesia
- o Eye ointment via gloved finger or swab—do not contaminate the tip of the Puralube tube
- o Shave
- o Tape to remove excess hair
- o 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!
- o Confirm depth of anesthesia—firm toe or tail pinch, watch for breathing change or twitch
- o Move patient to surgery area—carefully do not contaminate scrubbed skin
- o Temperature probe lubricate, insert, tape to tail

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

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

Recovery

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

Clean up

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