

SURGICAL ASSISTING

BASICS

CDA 201

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SURGICAL ASSISTING AND STERILE SET UP

Objectives

Room preparation and draping

Patient preparation and draping

Surgical scrub and gowning

Putting on sterile gloves

Gowning the surgeon and other assistants

Review of surgical procedures – implants, bone grafting, sinus lifts

Reviewing the efficient surgical assistant

Instruments, set up and sterilization

THINGS TO KEEP IN MIND

- Wear a cap and mask when setting up the surgical procedure
- Have a list of items needed on a recipe card for each procedure to gather items efficiently.
- Mobile units with items set up on, or carts with drawers of items needed works well.
- Gather all items needed ahead of time.
- Wipe all surfaces and counters with disinfectant.
- Set up scrub area with gowns, bonnets, gloves and masks for each team member.
- Open sterile drape and drape the mobile table, cart or counter.
- Carefully open all items onto sterile field, ensuring nothing touches a non- sterile area.
- Do not touch any sterile area without sterile gloves.
- Dispense all blades, sutures, anesthetic, gauze and supplies needed.
- Any small items can be double bagged to avoid rolling off sterile field.
- Allow time to scrub and glove and set up items before the surgical procedure.
- Once scrubbed, set up the items on your sterile field, making sure not to touch anything that is not sterile.
- Have a circulating assistant open items you may have missed.
- Do not lean on the sterile drape or consoles.
- Keep sterile gloved hands above your waist at all times during the procedure.

- If gowned, do not brush up against a non-sterile area or person, turn your back to the area to pass if needed.
- Any area that the doctor or sterile assistant touch, must be sterile.
- Use sterile suction tubing, have a circulating assistant connect tubing and turn on.
- Have a sterile garbage bag, or area to dispose of all disposable items.
- Keep sharps in one safe area, for counting after procedure.
- Use sterile tubing to cover and drape hoses or hand pieces.
- Use sterilized tin foil as light handle drapes, they can be manipulated easily and economical.
- Have circulating assistant assist you with setting up tubing, irrigation tubing, hand pieces, or any other non-sterile equipment.
- Have sterile bowls of sterile water or saline and monoject syringes for irrigation.
- Have sterile small bowls for grafting materials, these can be purchased at kitchen stores or dollar stores.
- Cover surgical set up with sterile drape before the patient is seated.
- Have a basin of chlorhexidine 2% for patient's face scrub, with 4x4 gauze and forceps
- Have circulating assistant scrub patient's face starting with the mouth and working outward, over the patient's safety glasses and under chin, repeat 3 times.
- Have circulating assistant give patient a chlorhexidine .2% rinse for 30 seconds.
- Prepare to drape the patient, without touching their clothing, touching only the sterile drape.
- Connect all the hand piece hoses and suction hoses to the drape with towel clamps.
- Have the circulating assistant stay with you to open materials, grafts, implants, etc.
- Assist with gowning and gloving the doctor.
- You are ready to start the procedure!

SURGICAL SCRUB AND GOWNING

- Have all supplies set up, gown, scrub, bonnet, mask and gloves
- Open the outside package of gown and open gloves onto the sterile area to one side of the gown.
- Put on mask, safety glasses and bonnet.
- Open scrub and take out nail cleaner and start with cleaning all nails.
- Rinse hands and arms in water using a foot or knee water valve.
- Scrub from fingers, up each finger between and around each finger, working up to palms, then back of hands, followed by scrubbing up to the elbow.
- Rinse from finger tips to allow water to drip down to the elbows.
- Re-scrub again with the same routine.
- Scrub the other hand, twice and rinse from finger tips to elbow.
- This routine should be at least 5 minutes of scrubbing.
- Do not touch any taps, and keep your hands up to allow water to drip down your elbow.
- Take the sterile towel off the gown set up and dry one hand with one end of the towel, starting with the fingertips and working down to the elbow. Dry the other hand with the other end of the towel.
- Keeping your hands up, and not dropping them to below your waste.
- Carefully pick up the gown from the inside of the gown, that is considered not sterile, put your hands into the sleeves **but not through the cuffs**.
- Have the circulating assistant tie up the back of your gown.
- With your hands inside the cuff of your gown, take the cuff of your glove and lay it against your thumb area, and slip your hand into the inside of the glove, wrapping the cuff of the glove over the cuff of your gown. Making sure not to touch the outside of the sterile glove.
- Now take the sterile gloved hand and slip your fingers inside the cuff of the next glove and put it on the other hand, pulling the cuff of the glove over the cuff of your gown.
- There is a tie on the front of your gown attached to a card. Pull the long tie and card off one end and have the circulating assistant touch one end of the card, hold it while it is still attached to the long tie, while you rotate around then grab the tie, pull it off the card and tie your own tie up in front. Make sure that you do not tie behind you, this area at your back is considered- Not Sterile!
- Keep your hands in front and above your waste, all other areas are considered not sterile.
- If you have to adjust your mask, bonnet, safety glasses, have your circulating assistant do that for you.
- You are ready to set up your sterile field of instruments and materials.
- Allow 15 minutes to do this scrub and gown before you start.

CLEAN UP POST SURGERY

Sterilizing the instruments and supplies and ensuring all the instruments are ready for the next procedure.

When setting up the trays, ensure all the instruments are clean, dry and placed on the tray in order.

All hoses, and hand pieces should be rinsed or flushed with clean water prior to wrapping.

All implant burs need to be flushed inside the hollow drill with fresh water before placing back in tray setup.

You can place, needles, extra gauze, monoject syringes, cotton applicators, tin foil for light barriers, patient drapes all on the tray before wrapping. Wrap in a way that the assistant can open the tray without touching the sterile supplies inside. Place indicators inside the wrap and indicator tape on the outside. Mark the outside of the wrap, what tray set up it is inside, include the date.

Have pictures of a completely set up tray for sterilization team to set up accurately.

Don't over load the steam sterilizer, leave ample space between trays to allow good circulation and drying.

Don't overload the Statim, ensure lots of space around each instrument.

Allow wrapped items to dry completely before removing from the sterilizer.

If removing trays ensure that the wrap does not rip or the tray needs to be rewrapped and re-sterilized. Any damaged or damp wrapped item is considered NOT STERILE!

Never reuse sterile bags or CSR wrap.

Make sure all items are sealed and bag or wrap is not open.

Wrap all implant cases with a double wrap and write on outside the items inside.

Double wrap all small items that may roll when setting up procedure.

Double wrap all sharp items to avoid piercing the wrap.

Each tray setup or cassette should have separate setup for:

- Grafting
- Extractions
- Soft tissue biopsy
- Sinus lift

GRAFTING MATERIALS

Autograft: from the patient's own body

Allograft: from another human donor

Xenograft: from another species, bovine, equine, porcine

Synthetic graft: from synthetic materials

Bone screws

Membranes: resorbable or non-resorbable

Grafting is done to maintain the ridge of extraction site following surgery to maintain the bone levels for future implant surgery.

Grafting may be done to build up a thin buccal wall or a ridge that has resorbed.

Various sites may be used for autografts, such as: the ramus area, tuberosity or bone may be scraped to add to another site. Bone can be collected in a bone trap while performing an osteotomy while preparing for implants. All autograft bone that has been collected must be placed in a sterile bowl with sterile saline to keep until the recipient site has been prepared.

THE SURGICAL DENTAL ASSISTANT – THINGS TO CONSIDER

- Plan ahead, look at the week's schedule, discuss procedures with the surgeon so you can order supplies and ensure everything will be in ready. Eg. Implants, lab work, surgical items that need to be ordered.
- Label or set aside any special items for the patient.
- Have surgical stents made ahead.
- Make sure each procedure has adequate time booked, to stay on time.
- Check file to see the last radiograph, does it need to be retaken prior to surgery.
- Have consent forms ready for signing, review the medical history for any allergies or medications.
- Have recipe cards written up for each procedure, and pull all the supplies and instruments ahead of time.
- Have a bathroom break before you start a long procedure. Stay hydrated!
- If the patient is having a bathroom break, make sure they keep the door unlocked if they have had any premedication or sedation.
- Have patient come into another operatory to have consents, questions, rinses, vitals, anesthetic or set up prescriptions for the care giver ahead of time.

- Have surgical operatory set up, then scrub in and prepare for the procedure.
- Have the circulating assistant care for the patient and bring them into the surgical operatory once you have set up and covered the tray of instruments.
- Once the patient has been seated, stay professional, even if they are sedated they can hear and may remember what has been discussed.
- Have extra supplies, gauze, sutures set aside to open later if needed.
- Have a bowl of sterile saline for irrigation and also to run the suction through occasionally to clear the suction.
- Have a designated area to put sharps to count later.
- Have a sterile garbage bag set up for disposables.
- Have a sterile bowl set aside for implant drill bits or small items as they are used.
- When assisting do not desiccate the surgical site, blood and moisture is good.
- Bone will die if heated or desiccated so use sterile saline with a monoject syringe to keep the site moist as the bone is being drilled.
- Use a 4x4 gauze at the back of the patient's oral pharynx to avoid fluid going down the throat or small items dropping down the patient's throat.
- Have two suction tips for the areas you are suctioning, use only a surgical suction tip in the surgical site, do not use the same tip for the oral pharynx. Use a larger tip or saliva ejector for saliva and the oral pharynx. Don't introduce bacteria from saliva into the surgical site.
- If using a bone trap on your suction careful not to suction up tissue or saliva, only bone collected from the surgical site. Switch suction tips if needed.
- Keep all your instruments organized for easy retrieval.
- The circulating assistant should stay with the team throughout the procedure.
- The circulating assistant can record any materials used, eg. Implants, bone graft material, number of sutures or blades.
- When procedure is complete, the circulating assistant can care for the patient, while you are cleaning up.
- You can remove all sharps and count sharps, then dispose in sharps container.
- Use the mayostand drape inside out for a garbage container, for large items (eg. gowns).
- Dispose of all used gauze and disposable items.
- Set aside any biopsy specimens for labelling and charting later.
- Take all instruments to sterilization area for processing.
- Take off all gowns, gloves, bonnets and keep your mask on for clean up.
- Wash hands and don a new pair of clean gloves to wipe down the room.

POSTOPERATIVE CARE OF YOUR PATIENT

If your patient has been sedated, proper care with licensed staff are to recover the patient.

Follow the guidelines set out by the College of Dental Surgeons of BC.

The patient should not be left alone following surgery, monitor the patient to ensure they are feeling fine before calling in their care giver to review post- operative instructions.

Have all prescriptions written by the doctor and review the medications with the patient and the caregiver.

Have all post-operative instructions written out, depending on the procedure with the office phone numbers.

Review the instructions with both the patient and caregiver.

Have sterile gauze, monoject syringes and postoperative instructions for patient to take home.

Have the patient set up any post- operative appointments before they leave with the receptionist.

Escort the patient to their car, and use a wheel chair if the patient was sedated.

AFTER SURGERY CLEAN UP

Hint: During the surgical procedure use one garbage bag, so if an instrument goes missing, you will know where to look.

Clean all instruments and place in ultrasonic. Carefully inspect each instrument to ensure no debris has been left on them. Surgical burs need to be irrigated and the tips scrubbed of debris and bone fragments.

All instruments should be dried before placing in cassettes or trays.

Use a brush to clean the inside of suction tips to remove debris.

If using suction hoses that are not disposable, rinse copious amounts of water through the hose before wrapping for sterilization.

Use a monoject syringe to rinse out the implant hand piece and run the head of the hand piece in water for several seconds to purge any blood or debris. Lubricate the hand piece then wrap for sterilization.

Clean the motor and cord, and cover the cap over the motor, package and sterilize.

Clean any debris off the implant case, load the drills once cleaned and record the number of uses of each bur in a record log, double wrap, label and date before sterilization.

EXTRA SUPPLIES TO HAVE ON HAND

Rule: If it can be dropped, fall off the tray or become contaminated, have extra supplies wrapped, sterilized and on hand.

- Large and small metal bowls that can be sterilized, these can be purchased from the dollar store or kitchen store.
- Disposable monoject syringes
- 2x2 gauze
- 4x4 gauze
- Cotton tipped applicators
- Long and short needle tips
- Tinfoil for light handles
- Patient drapes
- Extra suction tips and hoses
- Anesthetic syringe
- Extra surgical drapes
- Rapid rolls or sterile barriers
- Individual instruments wrapped, (eg. mirror, needle drivers, tissue forceps, scissors, retractors, forceps)

Also have extra blades, sutures and items needed on hand to be opened by the circulating assistant if needed.

The most important thing to remember as a surgical assistant is to be organized and plan ahead.

