Head and Neck

(updated October 9 2010)

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Tumor board

- Tumor board is a conference held by the H&N team every Friday at 6:30AM which includes Otolaryngology, Radiology, Nuclear medicine, Pathology, and Dentistry. All teams are expected to be present, except certain teams involved in Friday AM didactics (Peds). Operating surgeons for a 7:15am case may leave early. If you are not going to be at Tumor board, have someone present your patient for you.
- The resident who sees a new cancer patient in clinic is responsible for creating a new tumor board document. The senior on the case in the OR is responsible for generating a new TB document for path review.
- Prior to tumor board, the presenting resident should:
  - Review all data obtained on the case (path, radiology, consults, TNM staging, proposed treatment plan)
  - Create a Tumor Board document (EPIC SmartText “OTO:Initial Tumor Board Notes” or “OTO: Follow-up Tumor Board Note”).
  - Add the patient to the shared EPIC tumor board list. Enter under Patient Comments the staff, your name, and the data to be reviewed. The deadline for TB additions is Thursday by 10am, or for VA Wednesday by 5 pm.
- A sample presentation:
  - CC, HPI: 54 year old smoker/drinker with tongue lesion for 2 months.
  - Pertinent positives/negatives. Pertinent past hx should include cancer hx and medical hx that could affect tx.
  - Directed PE: 4 cm deeply infiltrative lesion on lateral tongue FOM, no bone invasion, 3 cm node Level I, poor dentition. Remainder of exam unremarkable
  - Assessment/Plan: Clinical stage III (T3N1M0) tongue cancer. Plan is combined surgery (resection, neck dissection; possible need for reconstruction) and radiation. Will need dental and radiation oncology consults.
- Fill in the final plan for all of your TB patients after conference is over

General Pre-op Considerations

- Most cancer patients deserve medical clearance via Surgical Co-Mgmt service.
- Check CBC, BMP, LFTs (case dependent), coags for most patients
- Check bHCG in DOSA for all females of child bearing age

Neck dissection

- Pre-op: Type and screen. Document CN IX-XII and marginal
mandibular function. Consent for possible local flap.

**TORS patients**

- Dr. Bayon’s patients should receive a Dobhoff tube at the end of the TORS cases. They should be NPO for one week.
- Please ensure to manage patient’s pain appropriately.

**Free Flaps**

**Pre-op**

- Radial forearm flap -- Allen’s test should be performed and “No IV, no needles” written on donor arm with magic marker.
- Fibula flap -- screen for history of LE trauma
- Check vascular labs for all donor sites
  - Vasc UE (radial) / LE (fibula) arterial duplex, bilateral
  - Vasc ABI, PVR, toe BP
- Type and cross 2-4 Units
- Consent for possible salvage pec flap

**Post-op**

- EPIC smartset: OTO: Free Flap Reconstruction PostOP
- Call SICU OCTOR to verify they are expecting the patient
- Anticoagulation
  - Funk: antibiotics x 48 hours (unless otherwise specified). Dextran 40 – 12 hours on, 12 hours off x 5 days. 81mg ASA qd x 14 days.
  - Chang: heparin 5000U SQ bid start at end of flap harvest, then q12h; ASA 325mg qd until d/c home.
  - Pagedar: heparin 5000U SQ tid for DVT prophylaxis, start at beginning of case, repeat q8-12h depending on pt size, cont until d/c home. No ASA. No transfusion unless Hct < 26.
  - Bayon: Toradol 30 mg IV q 6 hours for 5 days (ask Anesthesia to give first dose when under the microscope). No H/H requirements. Standard heparin protocol for DVT prophylaxis.
- Check H/H daily until stable. Transfuse for Hg < 10 unless otherwise stated.

**POD#0**

- Flap checks q3 hours with written documentation on the chart - check color, temperature, capillary refill, pinprick, Doppler. Become familiar with what the flap feels, looks, and sounds like early because changes can mean badness (e.g., white, cold, slow bleed on pinprick and no Doppler signal – arterial compromise; purple, swollen, bleeds to quickly on pinprick – hematoma or venous congestion). Do not hesitate to call senior/fellow/staff if you are concerned about changes because these are emergencies and must be addressed urgently
- Doppler: You will be told by the operating residents where to doppler, and a stitch may be present at the site.
- Pinprick: Prick and flick with an 18 gauge needle. (approx 1 mm deep in a RFFF, maybe 3-4 mm deep if a latissimus flap because the skin is thicker) and watch how it bleeds. Pagedar – just Doppler, unless there is concern. If there is concern, use 18Ga or 15 blade to scratch the skin surface to check bleeding.
- Check the donor extremity (fingers/toes) for sensation and signs of good perfusion
- If any bleeding – get STAT CBC and coags. Call staff. Follow serial H/Hs.
- Verify standard nursing care is done — roll Penroses with Kerlix as directed, strip JP’s q2h, head midline with no pillow and no objects pressing on side of neck which
can compress the flap pedicle, elevate HOB 30deg, donor extremity on 2 pillows. Usually AXR is done to check DHT placement.

- No pressors for Chang cases, for concern of vasoconstriction compromising the flap; bolus fluids if necessary, then call fellow/staff if patient is still hypotensive.
- POD #1: Trach cuff down if not on vent. Transfer to floor if stable. Consult PT (?OT) as soon as the patient hits 3JPW.
- POD#3-5: Trach change.
- POD#5: Funk / Chang RFFF - splint off. Pagedar fibula - splint off, leave the rest of the dressing.
- POD #7: Pagedar RFFF – bolster off. Funk / Chang - wound vac on STSG off. Sutures out if no prior XRT. Touch toe weightbearing on harvested leg (POD#4-7) for fibula flap.
- POD#10: staples out for back (scap) flaps
- POD#14: Sutures out if patient had prior XRT.

**Total Laryngectomies**

- Laryngectomies often have trach in place first, removed in OR or on floor, and Bivona stent placed to prevent stenosis.
- All TL patients should have a Speech Path consult for the “Life without a larynx” session. They are shown how to use an electrolarynx and get a loaner. This session can be done before or after surgery, but it’s done in-house (as opposed to in clinic).
- Usually start PO trial POD7 (if irradiated, POD 14) so pharyngeal incisions may heal before stressing them with passage of oral diet and risk of forming a fistula.
- Staff-dependent wether NG tube stays in or out during diet test. Start with colored liquid (such as grape juice), ask nurses to observe for fistula, if not advance to clear liquids and then full liquids. Also, be sure to leave the last JP drain in place until after there is no evidence of fistula, and also check a white count the morning of starting the diet
  - Hoffman- may want esophagram to eval for fistula prior to starting po. If white count high, don’t start the diet.
  - Van Daele- esophogram with thin barium.
- If fistula found, ask for minor tray and Penroses to make controlled tract at bedside
- On discharge, TL patients must have suction machine arranged for taking home, they need trach care teaching, wound care supplies, electrolarynx, tube feeds, VNA as needed.

**Thyroidectomy**

- **Pre-op**
  - Check and document Chvostek’s sign (tapping on facial nerve produces muscle twitching of cheek) and VC mobility.
  - Consent: risks of hypocalcemia, VC paralysis, scar
  - Labs: ionized calcium, TSH, free T4 levels.
  - Patient should already have seen endocrinology consult and have FNA results
  - Avoid contrast (eg for CT) as it may interfere with post-op radioactive iodine ablation (RAI).
  - If contrast has been used, wait 2 months or check urinary iodine before giving RAI.
- **Intra-op:** Funk preferences
  - If cancer possible, chlorhexidine prep (betadine can be absorbed and interfere with RAI)
  - No paralysis
  - 6.0 laryngeal monitor ETT (women), 7.0 ETT (men). Glide scope to help with laryngeal NIMS placement. No turn – pull table down from anesthesia.
  - Close with 4.0 monocryls, Dermabond. Queen Anne dressing.
- **Post-op**
  - Check calcium q8h until stabilized (alternative: 10% âCa and >60% âPTH predicts need for supplemental Ca).
- If hypocalcemia I<8.5 (see Hypocalcemia Protocol)
  - Symptomatic (peri-oral numbness, Chvostek’s sign) - IV Calcium gluconate 1 amp in 500 cc NS over 5 hrs.
  - Ca declines slowly, asymptomatic - replace with CaCO3
- Queen Anne dressing (Funk) off POD1
- Rx: If cancer, f/u with endocrine for RAI should be scheduled. May go home with Cytomel, Synthroid, or neither depending on when they are to be ablated.
- Non-cancer – home on Synthroid

Parathyroidectomy

- Pre-op: if PTH is required, call the critical care lab the day before and tell them we will need this lab the next day so they can sterilize the machine; Tell Brandi to let the OR know.
  - Ensure that "Tissue Bank: Parathyroid Harvest" order is placed when booking parathyroid cases - tissue bank will otherwise refuse to perform cryopreservation
- Intra-op
  - when you get to the OR the day of surgery call the lab and tell them to turn the machine on (it takes an hour to warm up)
  - draw a PTH at the start of the case, prior to excision, and 10 minutes post op. Should return to normal 10 min postop if not wait another 5-10 min and draw another (you will have already waited since it takes this long to get the results back)
  - superior parathyroid usually lies deep to the recurrent laryngeal nerve, within 1 cm of the cricothyroid
  - inferior parathyroid usually superficial, 1 cm around the inferior thyroid pole
- Post-op: Check calcium q8h until stabilized. See Thyroid section above for treatment of hypocalcemia

Direct Laryngoscopy, Bronchoscopy, and Esophagoscopy

- Pre-op
  - document dentition given risk of damaging teeth
  - Hoffman: patient should have custom dental guards (dental consult), or if cost is an issue, then the self-molded mouthguards (upper and lowers) bought at Walmart/Walgreen for about $15.
- Intra-op
  - Hoffman: wants copies of his Pentax images of the larynx in hand or readily available during the procedure. Usually starts with a Dedo or Lindholm. If suspension needed, uses Lewy arm.
    - For difficult airway, have Holinger anterior commissure scope as a back-up and understand that a 6-0 cuffed tube will not fit through it but a 5-0 MLT cuffed tub does see: Adult Airway in the Operating Room and Microdirect Laryngoscopy (Suspension Microlaryngoscopy or Direct Laryngoscopy)
    - Freche endolaryngeal procedures: settings may be as low as 1 cut / 2 coags
  - Funk: starts with the Holinger anterior commissure scope –never with the Kleinsasser. This is correctly inserted from the side, not the midline. Also, he likes to put Afrin pledgets in a mixture of 4% lidocaine and Afrin
  - Pagedar: Dedo for pandendo; Lindholm for laser cases; flex bronch and flex esoph for panendo. Rare use of mouth guard.

Parotidectomy

- Make table with columns: intact skin, opened skin in view, ex vivo, post-excision
Miscellaneous H&N staff-specific preferences

- **Funk**
  - In OR, tape up clinic note and Funk's consent discussion note
  - Needle tip cautery to raise skin flaps
  - Oral cavity cases: If deep defect, will put in ¼" penrose under the horizontal mattress sutures. Not a big fan of alloderm/bolsters. Usually nasotracheal intubation with nasal RAE but ask the night before. Always use a Molt retractor (with JP drains to pad the blades) to open the mouth; he does not use the McKesson; Ringgold is ok.
  - Trach: Army/Navy, 0 silk, Bjork
  - When ordering any tests for Funk patient, change the ordering provider to him so all results are routed to him

- **Chang**
  - 15 blade to raise skin
  - Oral cavity: bolster with alloderm, Xeroform, 2.0 silks
  - Total laryngectomies: interrupted connell stitches with ?salivary stent
  - RFFF: Dressing off POD#5 and vac off POD#7

- **Pagedar**
  - Needle tip cautery for mouth, Teflon tip for neck
  - 2.0 silk to sew in drapes, Lone Star instead of tie back sutures.
  - No pinprick for flaps
  - No loupes
  - Injection only for parotids. Doesn’t use Shaw blade or McCabe to follow nerve. No NIMS; puts a thousand drape (not ioban) over the midface to monitor nerve. Can use cautery to find both the posterior digastric and tragal pointer.
  - Tooth extractions not done in flap cases
  - Sewing in nasotracheal tube: place stitch in scalp, tie down piece of foam, then tie around ETT
  - RFFF: Dressing off POD#7
  - Oral cavity cases: Alloderm + Xeroform bolster over marginal mandibulectomy/FOM excisions. Usually nasotracheal intubation with nasal RAE. McKesson bite block & spandex lip retractor.
  - FFF dressing: moist 4x4s followed by dry 4x4s, ABDs, soft roll, plaster cast, ACE wrap (same for forearm)

- **Hoffman**
  - TNE: Spray with Afrin, then Ponticaine – neosynephrine, then place a single large cottonoid soaked in Ponticaine mix along floor of 1 nostril.
  - Botox: dilute 100U in 4cc perservative free saline --> creates 2.5U/.1cc. Then take 0.2ml of this and dilute in 0.2ml saline
  - Avoid needle tip cautery except in rare instances (when needed, usually prefer Colorado tip)
  - Parotids: use Shaw, McCabe, NIMS, and use incise drape. Don’t use a bovie. see: Parotidectomy with Facial Nerve Dissection