ATTENDINGS

Matt Cunningham-Hill, MD
Sashi Inkollu, MD
Cara Lyly, MD
Samantha Minc, MD
Lakshmikumar (Kumar) Pillai, MD
Ellis Salloum, MD
Pamela Zimmerman, MD

FELLOWS

Chase Woollen, MD 706-829-1439
Ibrahim Abou Saleh, MD 424-278-3069

MIDLEVELS (71400)(inpatient):

David Vitez, PA
Nikki Vogus, NP

MIDLEVELS (outpatient):

Emily Alt, NP
Jordan Kerr, NP

USEFUL PHONE #S

Service Phone	75279
Vascular Midlevel phone	71400
Care Manager	75282
HVI Utility Room Code	2017#
HVI OR Front Desk	74012
HVI OR Charge Nurse	75504
HVI Charge Anesthesia	76274
Vascular Lab Tech	74003
Vascular Ultrasound	74127
Dialysis unit	74108

CONFERENCES: **Mondays 3 pm** in HVI 7th floor

TIPS FOR SERVICE

- Helpful order sets:
  - HVI SVASC ADMISSION
  - HVI OR IR POST-PROCEDURE, POST-ANGIOGRAPHY
  - (used for bedrest and access site instructions after cath lab procedures)
  - HVI SVASC CAROTID ARTERY STENT POST-OP
  - HVI SVASC CAROTID ENDARTERECTOMY POST-OP
  - HVI SURG VASC INTRA-ARTERIAL THROMBOLYSIS
  - HVI SVASC EVAR
  - HVI SVASC OPEN AAA REPAIR POST-OP
  - VASC DISCHARGE ORDERS
  - HEPARIN PROTOCOLS: (LOW INTENSITY OR STANDARD)
- Every patient should be started on ASA and a statin (atorvastatin 10 mg) if they are not already - it is a Vascular Surgery quality measure (VQI).
- **Consents for any IV sedation cases need both a procedure AND sedation consent.**
- There are protective eye shields and thyroid shields available for all residents in the 5th floor workroom for endovascular cases. DO NOT LOSE THESE.
- Most patients who get a peripheral arterial stent should be started on Plavix with a load of 300 mg on the day of intervention and then 75 mg/day for three months. Ask the staff if you're unsure.
- Different attendings have clinics at different locations which can be selected in the vascular

VASCULAR SURGERY

ROUNDS

- Interns carry the vascular dressing bag on rounds and keep it stocked with supplies.
- DO NOT LOSE THE DOPPLER!
- Don't stand around while others change the patient's dressings, be proactive and help change the dressings.
- Starts at 6:00 a.m weekdays

CONSULTS

- All consults from 8 am – 5 pm during the week should go to the patient's primary physician if they have an established provider.
- After 5 pm weekdays and on the weekends all consults and patient issues should go to on call staff (this includes all notes).
- All vascular patients' allergies should be reviewed ESPECIALLY CONTRAST ALLERGY and REACTION and Heparin Induced Thrombocytopenia (HIT)
- For wound consults, start with a detailed motor, sensory and pulse exam. If pulses are not palpable, but dopplerable, then recommend ABI/PVRs.If the extremity is pulseless and there is concern for acute limb ischemia, notify a more senior resident. Different attendings will have different wound care recommendations. If ABI/PVRs return normal, then recommend podiatry consultation forfurther follow-up.
- Try to take and upload wound photos to the EMR when possible – staff appreciates this
- TCCs should be place preferentially in theright IJ. Niagra preferentially placed in femoral.
- Obtain CXR post-operatively for a TCC placement and write an MD to nurse order stating it is cleared for use after this is reviewed

- All lines should be placed with junior or senior supervision and under sterile conditions.
- **Must know information for line consults:**

  Niagra:
  - Is dialysis need urgent or emergent?
  - Are they on anticoagulation?
  - Review prior imaging to check for central stenosis or thrombus
  - Selecting lines:
    - Trialysis catheters (triple lumen, one can be used for other infusions):
      - Right IJ 12.5 Fr 16 cm
      - Left IJ 12.5 Fr 16 cm or 24 cm depending on pt size (needs to reach RA)
      - Femoral 12.5 Fr 24 cm
    - Double lumen catheters:
      - Right IJ 13.5 Fr 16 cm
      - Left IJ 13.5 Fr 16 cm or 24 cm depending on pt size (needs to reach RA)
      - Femoral 13.5 Fr 24 or 30 cm

  TCC:
  - Can the patient lay flat?
  - How many lines have they had in the past? If multiple, then obtain venous duplex of neck
  - Are they on anticoagulation?
  - Do they need it (i.e. does nephrology think they need)?
  - Do they have a fistula, is it mature, can it be used?
  - Are blood cultures negative?

- **Must know information for IVC filter consults:**
  - Do they need it (i.e. what is the true contraindication to anticoagulation)?
  - Where are the DVTs and how extensive?
  - Are they allergic to contrast dye?
  - Calf Vein DVTs can be followed with duplex
  - If patient has had a massive pulmonary embolus or pulmonary hypertension, then a filter may be indicated to prevent death from further embolic event
  - What are their renal function parameters (do theyneed to be done with IVUS)?

- **Must know information for fistulas:**
  - Need conscious sedation and procedure consent.
  - Need venous blood gas POTASSIUM day of procedure
  - Can patient lay flat – if not, does patient need Niagara and go to dialysis
  - When was last dialysis – will patient need dialysis after the procedure before leaving the hospital (may require telephone call to Nephrology)

- **Must know information for angiograms:**
  - Need conscious sedation and procedure consent
  - Can patient lay flat?
  - Are groins clean?
  - Contrast allergy – pretreatment indicated?
  - BUN/Creatnine: if elevated creatnine – CO_2 may be indicated

CALL

- 24 hour call is 6am – 6am. You will cover vascular and trauma surgery. You're responsible to go to all traumas paged during this time.
- You will carry 76112 all night.
- Junior (78740) should be called for vascular issues on call, Senior (78742) will be called with trauma related issues.

Sign out night time events every morning before leaving the hospital.

Preop patients need preoperative note.

Postop patients need postoperative note.

All patients need daily progress note by 900 weekends

VASCULAR SURGERY PROTOCOLS

POSTOPERATIVE ORDER SET FOR CSF DRAINAGE FOR VASCULAR SURGERY

Vital Signs

- Neuro Checks. Call **Vascular Surgery Attending** immediately if any change in neuro status. **Q 1 hour**

Activity

- HOB Elevation < 30 degrees during bed rest
- Clamp drain for any patient turning/moving
- Strict bed rest while drain is actively draining
- Ok for OOB to chair once drain capped (must stay capped while in chair)
- Bed rest x 2 hours after drain removal

NURSING

Nursing - Monitoring

- Transduce and document CSF pressure using a flush-

less transducer system and the bedside monitor **Q 1hour**

- Monitor and record CSF volume drained **Q 1hour**
- Transduce and monitor MAP, call **Vascular Surgery Attending** if MAP < 90 **Q 1hour**

Nursing – Wound and Drain

- Assess CSF drainage site/dressing every 4 hours until CSF drain discontinued; document and notify ifchange
- If CSF becomes blood tinged, immediately cap drainand call **Vascular Surgery Attending** and **Neurosurgery on call**

Nursing – Drain management

- Level zero-point of CSF drainage assembly to right atrium
- Set drainage set –point to 10 mmHg. Do not change level without speaking with the **Vascular Surgery Attending**
- a) If CSF pressure > 10 mmHg, open the drain and drain 10 mL CSF, then reclose the drain and check CSF pressure

  b) If CSF pressure remains > 10 mmHg, repeat step a)to a maximum amount of 20 mL CSF in 1 hour

  c) If CSF drainage is required more than twice in 1 hour and the total amount of drainage would exceed20 mL in 1 hour, notify **Vascular Surgery Attending**

MEDICATIONS

- Phenylephrine in NS 100 mg/250mL (400 mcg/mL) IV

infusion
25 mcg/min (3.75ml/hr), IV infusion, CONTINUOUS

To maintain MAP greater than 90 IF neuro changes occurin lower extremities. Call **Vascular Surgery Attending** prior to starting.

Recommended starting dose: 25 mcg/minute

Recommend to titrate/taper: 12.5-25 mcg/minute every 3 minutes to MAP greater than 90. If no response may titrate in increments of up to 50 mcg/min every 1 minute
Soft maximum dose: 300 mcg/minute

DRAIN REMOVAL

- CBC
- PT/PTT
- Transfuse platelets if platelets < 100
- Transfuse FFP if INR > 1.3
- Cap drain x 6 hours, if any neurologic changes occur, re-open drain and call **Vascular Surgery Attending**

SURGICAL/PROCEDURE FOLLOW UP FOR VASCULAR SURGERY

VNUS - 2 week f/u with duplex to r/o EHIT/DVT, if negative with no reflux then f/u prn

Phlebectomy/Open Vein Stripping - 1 week f/u for wound check, then f/u 1 month

AVF creation - 2 week f/u for wound check, 8 week w/ duplex for flow volume

AVF graft creation - 2 week f/u for wound check, 8 week w/duplex for flow volume

Fistula revision - 2 week f/u for wound check, 8 week w/ duplex for flow volume

Aortogram with runoff - 4 week f/u with arterial LE non-invasive study, *pt with intervention in SFA, popliteal, or tibial need additional repeat f/u with LE noninvasive studyat each appointment at 3 months, 6 months, and then every 6 months

Angiogram Lower Extremity - 4 week f/u with arterial LE noninvasive study, *pt with intervention in SFA, popliteal, or tibial need additional repeat f/u with LE noninvasive study at each appointment at 3 months, 6 months, and then every 6 months

Fistulogram - no f/u needed unless specified by attending surgeon. Stitch can be removed at dialysis in 1 week.

IVC filter placement - f/u in 3 months to evaluate for removal

IVC filter removal - no f/u needed

TCC exchange - 2 week f/u for UE vein mapping for per-cutaneous dialysis access creation

VASCULAR SURGERY

TCC placement - 2 week f/u for UE vein mapping forpercutaneous dialysis access creation

CEA/CFA - 4 week f/u with duplex, then additional followup with duplex at each appointment at 6 months, 1 year, and then yearly

AKA/BKA - 2 week f/u for wound check

EVAR - 4 week f/u w/ CTA and abd duplex, the additionalfollow up with duplex at 6 months, 1 year f/u with abd duplex and CTA *if no endo leak or sac growth then follow up every year

Bypass - 2 week f/u for wound check and 4 week w/ arte-rial LE noninvasive study, then repeat at 6 months, 1 year,and then yearly

Iliac artery angioplasty or stent - f/u 4 weeks with arterial LE noninvasive study then repeat f/u every 6 months with arterial LE noninvasive study

Updated 9/1/23 PZ