

Plastic and Reconstructive Surgery

Institution: VUMC

Duration: 4 weeks

Supervising Physician: K Higdon

Contact Information:

Year of Training: PGY 1

Educational Objectives:

This rotation in Plastic and Reconstructive Surgery (PRS) is a 4-week experience in basic surgical technique, wound closure techniques, principles of wound healing, exposure to emergent and elective reconstructive surgery as well as aesthetic surgery. The resident will be required to be involved in both outpatient and inpatient patient care, surgical experience as well as clinic assessment / care.

Practice-Based Learning and Improvement

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:

- ✓ Write an accurate, detailed, and legible preoperative assessment and counseling note on all patients for which he/she serves as surgeon of record.
- ✓ Utilize assigned journal articles as well as available textbook chapters and information technology (including PubMed search and literature review)
- ✓ Participate in the education of patients, families, students, residents, and other health professionals.
- ✓ Incorporate formative evaluation feedback into daily practice.

Interpersonal and Communication Skills

- ✓ Communicates effectively with attending, residents, team members and other health care professionals. Effectively and appropriately consults other services.
- ✓ Work well with multidisciplinary team, coordinating care and working with specialists in a team setting for the management of plastic surgery patients. Effectively plan care after discharge, including rehabilitation and skilled nursing facility (SNF). Transition of care of patients is especially important in plastic surgery.
- ✓ Effective documentation in medical records in a systematic and problem based approach.
- ✓ Attends morning multidisciplinary rounds to discuss inpatients with all team members (medical students, residents, nurse practitioners).
- ✓ Communicates appropriately and professionally to patient and family members in pre / post-operative assessments (pre-operative consents to post-operative care).
- ✓ Demonstrates ability to develop and execute patient care plans appropriate for level of training.
- ✓ Participates in teaching conferences, rounds, journal clubs and works as a member of the plastic surgery team with plastic surgery residents and faculty. Expectation to be involved in medical student teaching.

Professionalism

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents must:

- ✓ Demonstrates a commitment to continuity of patient care.
- ✓ Displays a sense of responsibility and respect to patients, families, staff and peers.
- ✓ Demonstrates cultural sensitivity.
- ✓ Maintains a professional appearance, well groomed, appropriately dressed.
- ✓ Punctual in attendance, prompt and available when called upon.
- ✓ Motivated to learn, shows appropriate assertiveness, flexibility, adaptability toward education.
- ✓ appropriate attitude, cooperative, receptive to feedback.

Systems-based practice

- ✓ The resident should be able to assess the risks and benefits of all options for treating patients with surgical illness.
- ✓ The resident should be able to summarize the financial costs, potential complications, and long-term expectations for planned procedures.
- ✓ The resident should recognize the differences between the three hospital systems in which he or she will participate: federal, university, and private.
- ✓ The resident should be able to determine the benefit of additional treatment by other services
- ✓ The resident should be able to determine and convey to appropriate individuals the instruments and other materials necessary for all procedures.

Medical Knowledge and Technical Skills

Assessment and initial management of patients with a variety of clinical problems including:

- ✓ Wound healing (skin structure, wound healing, types of wounds, management)
- ✓ Wound closing techniques (simple closure / primary closure, skin grafts, local flaps, myocutaneous flaps, free tissue transfer)
- ✓ Management of benign skin lesions
- ✓ Management of malignant skin lesions
- ✓ Management of facial fractures and congenital disorders
- ✓ Management of hand injuries
- ✓ Reconstruction of wounds (lower extremity trauma, pressure sore reconstruction)
- ✓ Breast cancer / reconstruction
- ✓ Aesthetic Surgery
- ✓ Participates in both inpatient and outpatient surgical procedures with emphasis on techniques of wound closure and wound management are stressed.
- ✓ The individual performs variety of superficial, less complex surgical procedures under the supervision of senior house staff and faculty.
- ✓ Able to assess post-operative patients in a systematic manner and develop and execute effective and safe medical decisions appropriate for level of training. Orders appropriate diagnostic tests.
- ✓ Able to effectively identify ones limits and communicate appropriately with senior house staff.
- ✓ Understand management of traumatic and complex wounds of face, trunk and extremities
- ✓ Understand different wound closure techniques
- ✓ Appreciate algorithm of the "Reconstructive Ladder"
- ✓ Perform basic wound closure
- ✓ Perform wound debridement and Wound- VAC placement
- ✓ Understand initial assessment of maxillofacial and hand injuries

Description of Clinical Experiences:

1. You will be expected to carry the floor pager during the week day (7am-4:30pm) as well as selected nights. You will be assigned the selected nights upon start of the plastic surgery rotation. You will also be carrying the day consult pager during the week day (7:00am-4:30pm) when we are on No-No call (plastics only call, for interns on service July-September) and Face or Triple Call (hand/face/plastics, for interns who are on service October-June). When carrying the consult pager, you will be expected to see and evaluate the consult, create a plan and staff the consult with the 1st year fellows on the University service. During the week day, if the 1st year fellows on the University service are unavailable to staff the consult then you should staff the consult with VA 1st year fellow. If all 1st year fellows are not available and is an urgent consult, then you should staff the consult with any available 2nd/3rd year fellow.
2. You will participate in signout with our nurses / clinical specialists every morning (Amanda / Dora/Melinda) at 7 am in the plastic surgery resident room on the 3rd floor in the plastics clinic area.
3. You will be assigned at least 1-2 cases appropriate to your level cases with an attending daily (this may be alone, without a plastic surgery resident). An effort will be made to cater those cases to your designated specialty.
4. Please attend Plastic Surgery Conferences when possible

Description of Didactic Experiences:

Plastic Surgery Conferences are held occasional Mondays and every Thursday and Friday morning at 6:45-8:00AM. These are held in MCN room 4220.

Evaluation Process:

Faculty and senior residents will evaluate the performance of each resident using these goals and objectives. Each resident on the service will evaluate the rotation, the service, faculty and any senior residents also on the rotation.

Other Important Rotation Information:

Prerequisites

1. Basic knowledge and skills lab experience with basic lesion excision and suturing techniques.
2. Basic knowledge and skills lab experience with local anesthetics and patient resuscitation.
3. Basic knowledge of external anatomical landmarks, motor and sensory innervations and vascular distribution to extremities, major muscular groups and skin.
4. Basic knowledge of pre and post-operative care of patients, including basic resuscitation, analgesic administration, patient optimization.

Recommended textbooks:

Essentials of Plastic Surgery (Jeffrey E. Janis)

Plastic Surgery Secrets (Jeffrey Weinzweig)

Grabb and Smith (Charles H. Thorne, Scott Bartlett)

Plastic Surgery Emergencies: Principles and Techniques

Top 10 Consults for Plastic Surgery

1. Facial laceration

- repair deep layers with vicryl 3-0, 4-0, or 5-0
- repair skin with nylon 5-0 or 6-0 or fast 5-0 or 6-0
- repair lips and mucous membranes with chromic
- use absorbable in children or if you don't think patient will come back for f/u
- start from known landmarks
- washout and debride devitalized tissue
- for scalp lac in hair bearing area, repair deep with 2-0 vicryl and skin with staples

2. Near-amputation fingertip

- digital block
- in peds, may reattach in ER, even if completely off
- in adults, if totally devitalized and distal to DIPJ, do completion amputation
- debride bone fragments with rongeur (use hand tray or one from the call suitcase)
- close with chromic or nylon or monocryl

3. Fingertip laceration

- digital block
- close with nylon or chromic

4. Nailbed injury

- digital block
- remove nail with curved iris scissors or elevator
- keep the nail
- repair Nailbed with 5-0 or 6-0 fast
- replace nail (trim prn), stitch in place with chromic 4-0

5. Facial abscess

- after local anesthesia, drain through smallest incision

- use most cosmetically acceptable location, remember Langer's lines
- pack with gauze strip (for peds can be 1/8 inch strip made from 1/4 inch)
- remove strip next day

6. Lower/upper extremity wound from orthopedic surgery (usually intraop consult)

- go to OR and take photos
- ask ortho about what they found and what their plan is
- upload photos to starpanel
- talk to our attending for plan

7. Finger/hand fracture

- check X-rays
- if not sure, can always splint in safe position and f/u in clinic
- if open, wash out and home on antibiotics

8. Facial fracture

- check max face CT
- do exam: sensory of face, motor of face, check occlusion, vision, extraocular muscles, diplopia
- where there are scabs, there are often underlying injuries
- in most cases in adults can be done within 2 weeks
- if entrapment of extra ocular muscles present, need surgery during this admission
- tell primary to call ophtho if any concerns about eye

9. Dog/animal bite

- ask about animal, is it known? Up to date on shots?
- washout
- close loosely
- dose of IV antibiotics in house
- send home on Augmentin

10. IV infiltration

- examine hand and forearm, make sure pulses intact (radial and ulnar)
- if no evidence of compartment syndrome, remove offending IV if not done already, wrap with ace from fingers to proximal, elevate, write orders for all of that in chart
- if concern for compartment syndrome, talk to attending for possible release of hand and/or forearm (rare)

General tips for ER and ICU procedures:

- always use 1% lido with epi, safe to use even in the hand and will minimize bleeding, can dilute to half strength for peds
- for hand injuries, always ask about dominant hand and type of work patient does
- for peds, ask ER docs about conscious sedation versus intranasal Versed (ask how long the pt has been NPO and when they can sedate)
- for hand issues always get a hand series first (3 views)
- the ER (peds and adult) has special plastic suture pans and a hand tray if needed
- digital block: aim volar, aspirate first to ensure you are not in digital vessel, wait for effect (may take a few minutes)
- use loupes for hand and most face