Plastic Surgery – General/Orthopaedic Surgery

Year
R-1

Location
Miami Valley Hospital (MVH)

Duration
1 Month

Faculty
R. Michael Johnson, MD – Director
William C. Rigano, MD

Overview
The philosophy of the plastic surgery rotation is based on the premise that plastic surgeons should be comfortable with the diagnoses and management of common, uncommon, and complicated acquired and congenital deformities related to reconstructive and aesthetic patients. The rotation will consist of guided reading, inpatient and emergency consultations, didactic sessions, outpatient office hours, and a graded supervised surgical experience, all under the supervision of board certified or eligible plastic surgeons. The rotation is variable depending upon the duration and educational requirements of the residents program. It is located at MVH, Good Samaritan Hospital (GSH) primarily with occasional procedures at Kettering Medical Center (KMC). Office hours will be located at MVH and GSH.

Description
Learning is enhanced when residents are allowed the greatest degree of responsibility possible in patient care. The resident will be expected to evaluate each patient completely and to formulate a differential diagnosis and suggested management plan prior to presentation to the faculty when possible. The service is primarily a consultation service and admissions are not usually required. While plastic surgery is a specialized area of medicine, it is important to view the patient as a whole and not just the specific problem we are consulted to treat.

You will attend to offices of the Drs. Johnson and Nava who are full time faculty in the division of Plastic Surgery at Wright State University. Activities include evaluation and development of management plans for various acquired and congenital facial, breast, trunk and extremity deformities. You will be expected to interact with faculty, patients and ancillary staff in a respectful and positive manner. Experience with Dr. Rigano will be at his office, Advanced Breast & Cosmetic Surgery. This experience will provide the resident with valuable experience in practice management and negotiation.

The faculty will supervise patient management decisions and treatment as well as all procedures. This rotation will also include aspects of patient care related to cultural, socioeconomic, ethical, occupational and behavioral concerns. You will work closely with ancillary staff including emergency physicians and nurses as well as operating room staff.
**Principal Teaching/Learning Activities**

**Direct Patient Care (DPC)**
New inpatient or Emergency Consults- At MVH, and GSH all consults should be proctored or reviewed with the preceptor prior to dictation or institution of therapy or ordering major diagnostic tests. If possible, all patients should be seen the same day as consulted. Less urgent consults given late in the day may be seen on the following day. This is at the discretion of the preceptor. You are expected to perform a minimum of a detailed exam, with review of old records and available x-rays when appropriate. A short note should be placed in progress notes indication the consult is completed or in progress and to refer to the consult sheets. The consult should include all hand related issues impressions first, then all other pertinent diagnoses in descending order of importance. Dictation may then be performed on the MVH line (208-2309) after discussing it with the preceptor. An examination needs to include a detailed history, and a focused examination of neurovascular viability, range of motion, and appropriate x-rays.

**Patient Rounds (PR)**
It is recommended when possible for the residents to see patients prior to either morning conference, surgery or office hours. This may not always be possible. Most inpatients will be seen on a daily basis, however many may be seen at the discretion of your preceptor(s). Read all previous notes from other services, and discuss major diagnostic tests with faculty. For daily progress notes, please include the preceptor on the first line. Date and Time are important. The notes should be in SOAP form. Note the viability of the extremity, edema, splint, drainage and dressings.

Weekend rounds, if required may be checked out to the resident on call for the plastic surgery service. Direct communication is required to ensure high quality patient care.

**Outpatient Clinic/Office hours (OC)**
You will be expected to attend the office hours of the preceptor(s) of the division of WSU Plastic Surgery as arranged by the rotation director and preceptor(s). Surgery and didactic conference take priority but a minimum of 8 hours or 2 clinics a week is expected. In cases of illness notify the rotation director and the residency coordinator as soon as possible.

**Core Lecture Series (CLS)**
Specific didactic lectures on plastic surgery related topics are a significant part of the core lecture series. These lectures will be held on Tuesdays afternoons at MVH. You will be given the lecture schedule in advance.

**Plastic Surgery Case Presentations (CP)**
Specific time is allotted on Tuesdays for hand patients with interesting deformities. These cases will include photographs, x-rays. Residents will be given the opportunity to discuss these cases in a board exam format.

**Journal Club (JC)**
Journal club with review of plastic surgery articles is performed monthly as part of the Tuesday afternoon educational sessions. Evidenced based medicine principles will be promoted in this educational experience.

**Multidisciplinary Conferences (MC)**
Breast Conference
Tumor Board
Burn Conference
Educational Objectives

Cognitive Objectives – Pediatric Plastic Surgery, Reconstructive and Cosmetic Surgery

The resident should know:

A) Basic principles
   1) Basic wound healing
      a) Debridements
      b) Nutrition support
      c) Topical wound treatment
      d) VAC
      e) Skin substitutes Integra/AlloDerm
   2) Flaps and grafts
      a) Full thickness grafts
      b) Split thickness grafts
      c) Pedicled flap
      d) Free flaps
      e) Random flaps

B) Diagnosis and treatment
   1) Head and neck
      a) Skin cancer
         - Melanoma
         - Squamous cell
         - Basal cell cancer
      b) Trauma lacerations
         - Soft tissue injuries
         - Facial fractures
      c) Cosmetic introduction
         - Facial plastic surgery
         - Tissue fillers
         - Botox
         - Lasers

   2) Trunk
      a) Body lifting skin reduction procedures post bariatric
      b) Abdominal wall reconstruction

   3) Extremities
      a) LE
         - Flap reconstruction
         - Microsurgical
         - Reversed sural flap
      b) UE/Hand
         - Flexor extensor tendons
         - Coverage
         - Nerve compression
4) Breast
   a) Reconstruction
      - LD
      - TRAM
      - Implants
   b) Reduction
   c) Augmentation
      - Silicone vs. saline implants

C) Microsurgery
   1) Flap selection
   2) Flap harvest
   3) Microvascular anastomosis
   4) Inset

Principle Educational Goals by Relevant Competency: In the tables below, the principle educational goals from the Plastic Surgery Rotation are listed for each of the six ACGME competencies. The second column of the table indicates the most relevant principle teaching/learning activity for each goal, using the legend below.

*Legend for Learning Activities (see below descriptions)
AR – Attending Rounds CP – Hand Case Presentations OC – Outpatient Clinic
CLS – Core Lecture Series PSJC – Plastic Surgery Journal Club DPC – Direct Patient Care
MC- Multidisciplinary Conferences GR Guided Reading

1) Patient Care

<table>
<thead>
<tr>
<th>Principle Education Goals</th>
<th>Learning Activities*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectively obtain an accurate history</td>
<td>DPC, AR, CLS</td>
</tr>
<tr>
<td>Effectively perform and interpret an examination</td>
<td>DPC, AR, CLS</td>
</tr>
<tr>
<td>Appropriately select and interpret laboratory and imaging studies for patients under their care</td>
<td>DPC, AR, CLS</td>
</tr>
<tr>
<td>Effectively evaluate and manage common inpatient problems, including but not limited congenital deformities, and traumatic reconstruction</td>
<td>DPC, AR, CLS</td>
</tr>
<tr>
<td>Effectively evaluate and manage common outpatient problems, including but not limited to aesthetic surgery of the head and neck, breast and trunk, and skin cancer</td>
<td>DPC, OC, CLS</td>
</tr>
</tbody>
</table>
2) Medical Knowledge

<table>
<thead>
<tr>
<th>Principle Education Goals</th>
<th>Learning Activities*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand clinically applicable knowledge base of the basic and clinical sciences underlying the care of patients plastic surgery problems</td>
<td>CLS, GR</td>
</tr>
<tr>
<td>Access and critically evaluate current medical information and scientific evidence relevant to patients with plastic surgery complaints</td>
<td>OC, PSJC, CLS, GR</td>
</tr>
<tr>
<td>Know the appropriate indications for commonly ordered tests and procedures, including MRI, CT scans, plain x-rays</td>
<td>AR, CLS</td>
</tr>
</tbody>
</table>

3) Practice-Based Learning and Improvement

<table>
<thead>
<tr>
<th>Principle Educational Goals</th>
<th>Learning Activities*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and acknowledge gaps in personal knowledge and skills in the care of patients with aesthetic and reconstructive complaints</td>
<td>DPC, AR</td>
</tr>
<tr>
<td>Develop evidence-based strategies for filling gaps in personal knowledge and skills in the care of patients with aesthetic and reconstructive complaints</td>
<td>PSJC, CLS</td>
</tr>
</tbody>
</table>

4) Interpersonal Skills and Communication

<table>
<thead>
<tr>
<th>Principle Educational Goals</th>
<th>Learning Activities*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate effectively with patients and families</td>
<td>AR, DPC, OC</td>
</tr>
<tr>
<td>Communicate effectively with physician colleagues and members of other healthcare professions to assure timely, comprehensive patient care</td>
<td>CP, AR</td>
</tr>
</tbody>
</table>

5) Professionalism

<table>
<thead>
<tr>
<th>Principle Based Goals</th>
<th>Learning Activities*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behave professionally toward patients, families, colleagues, and all members of the healthcare team</td>
<td>ALL</td>
</tr>
</tbody>
</table>
### Systems-Based Practice

<table>
<thead>
<tr>
<th>Principle Educational Goals</th>
<th>Learning Activities*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand and utilize the multidisciplinary resources necessary to care optimally for patients with congenital and acquired deformities</td>
<td>AR, CLS, DPC</td>
</tr>
<tr>
<td>Collaborate with other members of the healthcare team to assure comprehensive care for patients with congenital and acquired deformities</td>
<td>AR, DPC</td>
</tr>
<tr>
<td>Use evidence-based, cost-conscious strategies in the care of patients with congenital and acquired deformities</td>
<td>AR, OC</td>
</tr>
</tbody>
</table>

**Guided Reading (GR)**
Grabb and Smith and Plastic and Reconstructive Journal located in the Craig Memorial Library, Selected Readings

**Evaluation Methods**
A pre-rotation test and post-rotation test will be administered. These are primarily used for feedback regarding the value and appropriateness of the daily lectures. They will be considered in final evaluation, but will be minor factors. The major emphasis will be placed on presentations during the rotation, especially the presentation of new consults. There will be formative evaluations through the month and a summative one at the end if the rotation.

This written evaluation will be completed by your preceptor and will be discussed with you at the end of the rotation. It is advisable by your preceptor and will be discussed with you at the end of the rotation. It is advisable that you discuss your strengths, weaknesses, and progress with your preceptor at that time.
General surgeons are trained to manage a broad spectrum of diseases and injuries to almost any area of the body which requires surgery. These physicians are involved in diagnosis and treatment as well as pre-, intra- and post-operative care. They are usually responsible for the comprehensive management of trauma and critical care patients as well. Although its scope is broad, general surgery usually involves the abdomen, breasts, peripheral vasculature, skin and neck. General surgeons today in the United States only rarely perform complex neurologic, orthopaedic, thoracic or urologic procedures. At a Glance. Training. Plastic surgery is a surgical specialty involving the restoration, reconstruction, or alteration of the human body. It can be divided into two categories. The first is reconstructive surgery which includes craniofacial surgery, hand surgery, microsurgery, and the treatment of burns. The hand surgery field is also practiced by orthopedic surgeons and general surgeons. Scar tissue formation after surgery can be problematic on the delicate hand, causing loss of dexterity and digit function if severe enough. There have been cases of surgery to women's hands in order to correct perceived flaws to create the perfect engagement ring photo.[20]. Orthopedic surgery is the medical specialty dedicated to the surgical treatment of issues related to the musculoskeletal system (i.e., the bones and connective tissues, such as ligaments and tendons). This involves a wide variety of procedures, from ACL and meniscus repair to hip replacement to spinal fusion and more. Orthopedic surgery may be done to treat condition-, age-, or accident-related concerns, and therefore may be carefully planned or entirely unexpected. Dana Neely / Getty Images. These and others often overlap with other medical specialties, including neurosurgery, plastic surgery, rheumatology, and podiatry. Orthopedic surgeons often have to work closely with other physicians in order to manage complex problems. General surgeons are not trained to do orthopedics nor are orthopedic surgeons trained to do general surgery. 4. Sponsored by TIKI. Either medically (fluid resuscitation) or surgically (external fixators, debridement, plastic surgery intervention and in worst case scenarios, amputations). Honestly speaking, nobody gets to see such badly injured cases. I am, on purpose, refraining from posting examples of these cases as it can be visually very gory. The Division of Orthopaedic Surgery is a regional, national and international leader in education, research and patient care. The division has 46 highly qualified surgeons who cover all sub-specialties and have high patient volume. Meet the Team. Cartilage and meniscus tissue engineering. Cryopreservation of articular cartilage. Collaborative orthopaedic research. Teaching. The five-year Residency Program encourages the development of an exceptionally well-trained orthopaedic surgeon, who has the skills and knowledge to enter practice upon graduation. The program offers a high-volume, hands-on educational experience with a high ratio of staff to residents, and excellent collegiality between them.