

THE CUTTING  
EDGE  
OF PEDIATRICS



# When to Call a Plastic Surgeon

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Plastic Surgery

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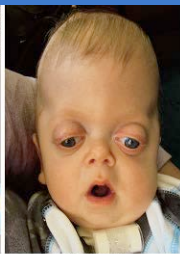
## Why This Talk?



Type I



Type II



Type III



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## Agenda

- Plastic Surgery
- General Pediatric Plastic Surgery
- Specialty Plastic Surgery

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## Plastic Surgery?

- Hard to define!
- Operate from head-to-toe in all age groups
- No one organ system
- Rapidly expanding
  - Vascularized composite allotransplants (face transplant)
  - Large volume fat grafting
  - Perforator flaps

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## Plastic Surgery?

### Plastikos – to mold or shape

- Majority of procedures do not
- Even the NAME is confusing!

Category

PLASTICS

The word plastic comes from the Greek plastikos meaning it has this quality

SHAPEABLE

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## Plastic Surgery?

- Public equates plastic surgery with cosmetic surgery
- Widely publicized through popular media
- Poorly understood



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## Plastic Surgery?



- Cosmetic surgery is only half of the puzzle
- The roots of plastic surgery lie in its reconstructive heritage



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## Plastic Surgery?

Cosmetic

Reconstructive

The more complicated  
the problem, the more  
the two blur together

Plastic surgery is a problem solving specialty  
through the application of principles.

– Dr. Vasconez

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## General Pediatric Plastic Surgery

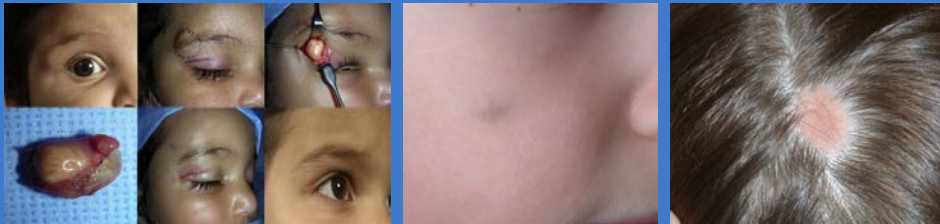
- Lumps & bumps
- Wounds
- Scars
- Minor burns
- Macromastia
- Gynecomastia

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## Lumps & Bumps

- Cysts, lipomas, dermoids, pilomatrixomas, nevi
- NOT ALL need to be removed
- Dermatology commonly evaluates nevi first



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## Lumps & Bumps – Timing

2016



Drug Safety Communications

**FDA review results in new warnings about using general anesthetics and sedation drugs in young children and pregnant women**

**Health care professionals** should balance the benefits of appropriate anesthesia in young children and pregnant women against the potential risks, especially for procedures that may last longer than 3 hours or if multiple procedures are required in children under 3 years. Discuss with parents, caregivers, and pregnant women the benefits, risks, and appropriate timing of surgery or procedures requiring anesthetic and sedation drugs.

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## Wounds

- Acute vs. chronic?
- Acute – trauma
- Chronic
  - Delayed healing & pressure sores
  - Stage
  - Not urgent (usually)
  - Establish care in wound center

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## Scars

- All skin trauma deep to epidermis
- 1 year maturation process
  - No revisions prior to maturation



### Scar Care

- Massage
- Sun Protection (SPF 30+)
- Silicone Sheeting



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## Macromastia

### Indications

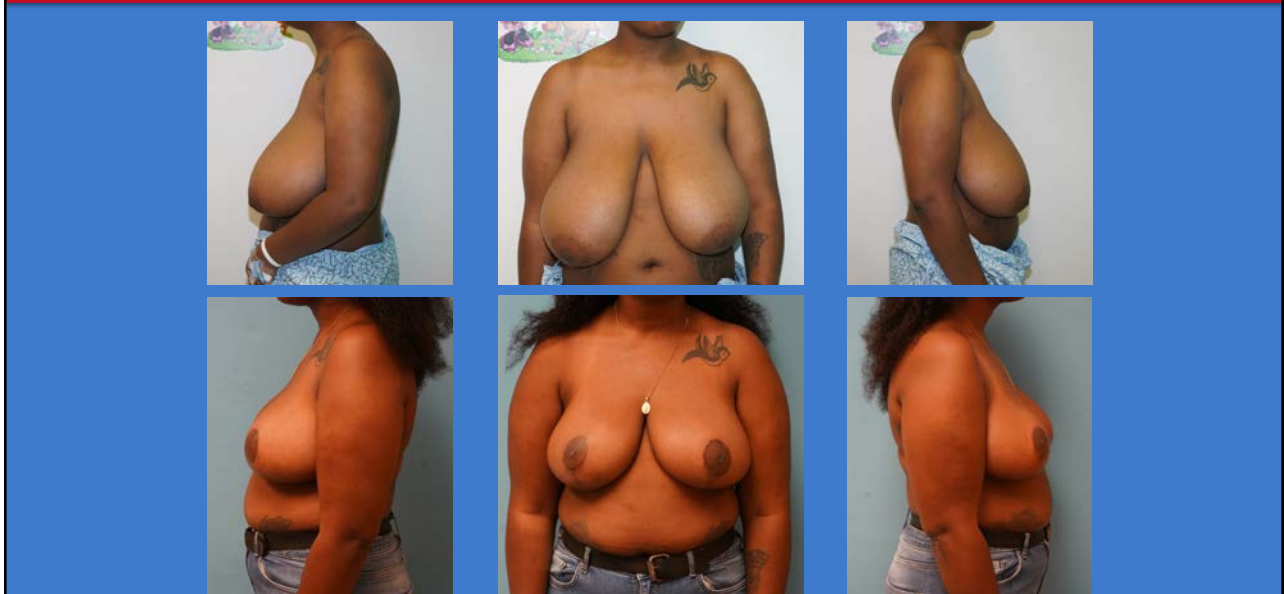
- Chronic neck/back pain &/or intertrigo
  - Decreased QOL
- At least 16 years old
- BMI < 35
- Non-smoking

### Common Questions

- Breast feeding?
  - Not affected, but may require supplementation
- Breast CA Risk?
  - NO increased risk
    - Actually decreased?
  - ↑ risk of requiring breast biopsy
- Nipple sensation
  - 1<sup>st</sup> year transient numbness common
  - Permanent in 10%

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## Macromastia



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## Gynecomastia

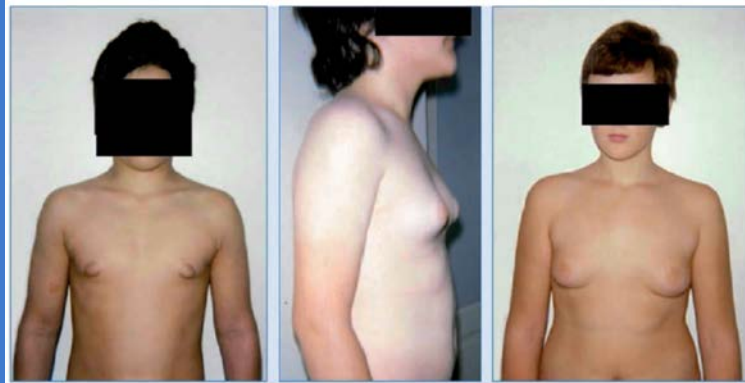
- Pubertal
  - > 50% incidence?
- Important to R/O other etiologies
  - Testicular Tumors
  - Hormone Imbalances
    - CMP, FT, TT, LH, Estradiol, DHEA, TSH, FT4, hCG, PRL
  - Drugs
    - MJ, Amphetamines, Steroids, etc....

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# Gynecomastia



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# Gynecomastia



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## Specialty Plastic Surgery

- Hand
- Wound
- Cleft
- Craniofacial
- Vascular Anomalies
- Facial Paralysis
- Brachial Plexus
- Breast

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## Specialty Plastic Surgery – Cleft

- Multidisciplinary team
  - PS, ENT, Orthodontics, SLP, Genetics, Psychology
- Prenatal visit
- Early care focused on feeding
  - NGT usually unnecessary
  - Modified bottles
  - CP babies usually unable to breast feed

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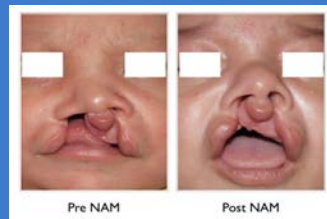
## Specialty Plastic Surgery – Cleft

- Timing
  - NAM?
  - Lip repair @ 3 mos
  - Palate repair @ 12 mos
  - ABG @ ~7 – 9 years
  - Orthognathic surgery after facial maturity?
  - Cleft rhinoplasty
- Non-cleft VPI (submucous cleft palate)
  - Refer if speech concerns

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## Specialty Plastic Surgery – Cleft



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## Specialty Plastic Surgery – Craniofacial

- Abnormal Head Shape
- Ear Anomalies

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## Craniosynostosis or Plagiocephaly?



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## Lambdoid Craniosynostosis



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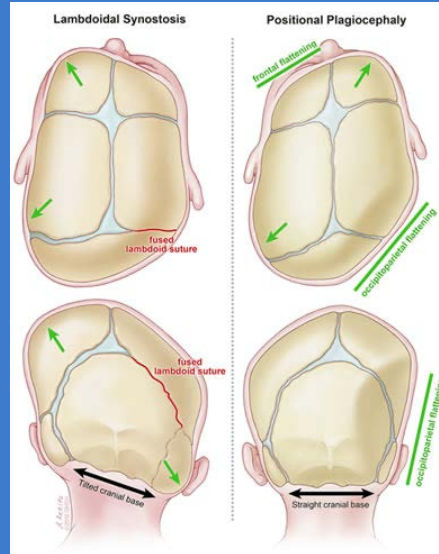


## Positional Plagiocephaly



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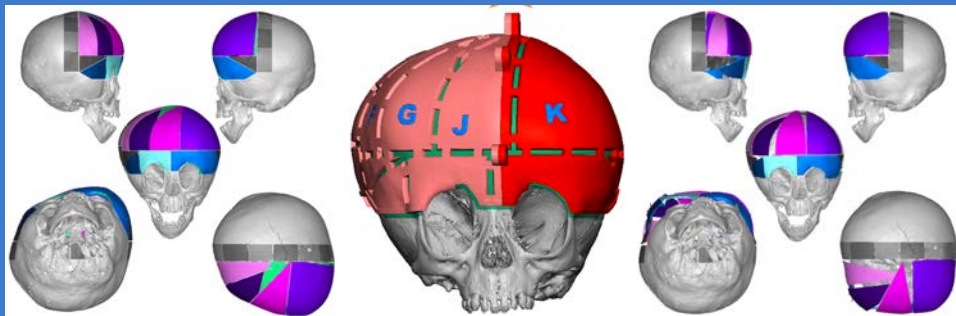
## Craniosynostosis vs. Plagiocephaly



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## Craniosynostosis

- Early referral
- CT gold standard over cephalograms
- Surgery as early as 2 months of age
- When in doubt...refer ☺



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## Positional Plagiocephaly

- R/O reversible causes
  - Tummy time
  - Torticollis → PT
- Molding helmet therapy
  - Moderate-severe cases
  - Run through NSGY clinic
  - Ideally started ~4 months
    - Hard to remodel past 12 months



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## Congenital Ear Anomaly

- Neonatal molding is highly effective
- Relies on circulating maternal estrogens
  - Breast feeding may slightly elongate this process
- Need to start by 4 WEEKS of life
- EARLY/Urgent referral
  - Not covered by insurance



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## Otoplasty

- Surgery deferred until ears are “mature”
  - 5-6 years of age
- 6 weeks of head “dressing” & restrictions
  - Better to wait until child will be compliant



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## Summary – Key Points

- Plastic surgery isn't just for cosmetic procedures
- Function and quality-of-life are important
- Elective treatments can wait (*most of the time*)
- Teamwork between families, pediatricians and surgeons is key – especially when there are multiple surgeries ahead

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