Quick Fixes: Emergency Procedures for the Office Based Pediatrician

Keri Carstairs, MD FACEP
Medical Director, Emergency Department
Rady Children's Hospital

Rady Children's Specialists of San Diego

Rady Children's Hospital San Diego

Disclosures

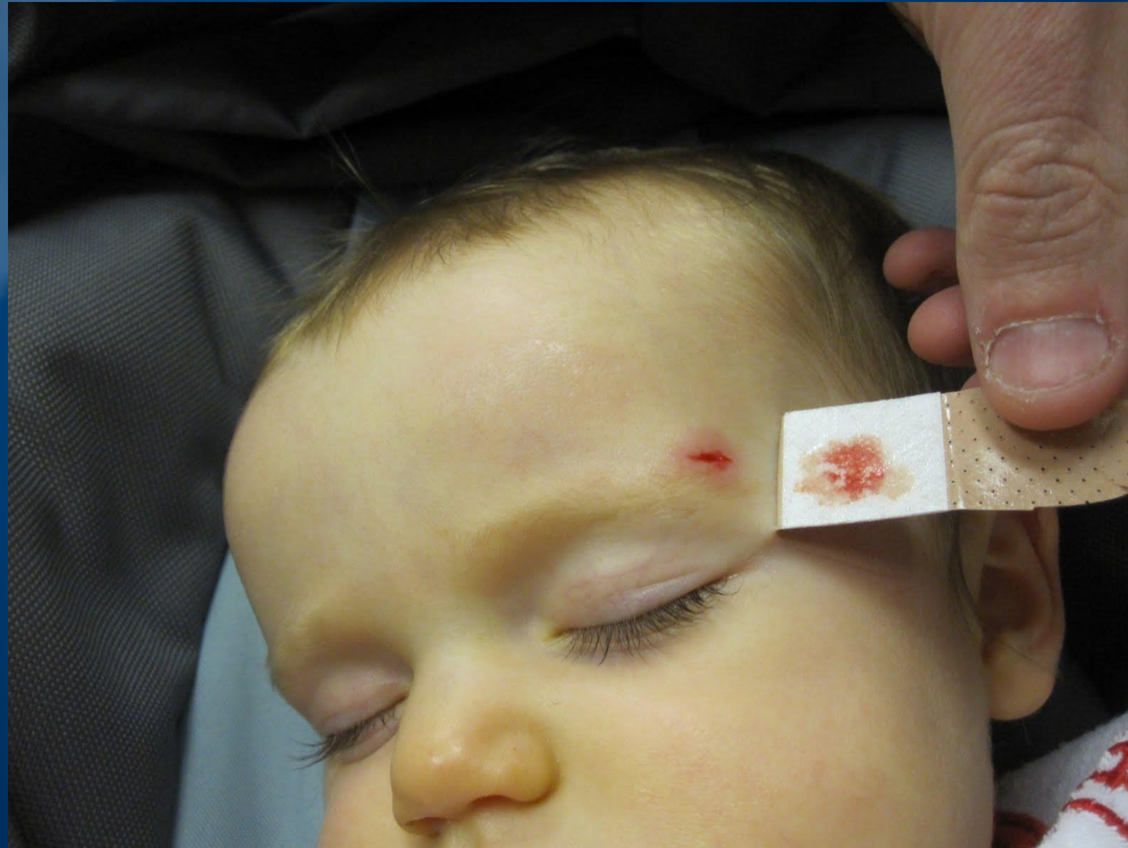
- None

Objectives

- Recognize the need to perform minor procedures in the office
- Understand the management, risks and benefits of office based procedures
- Develop a triage system to refer patients to the emergency department
- Prepare your patients for an Emergency Department visit

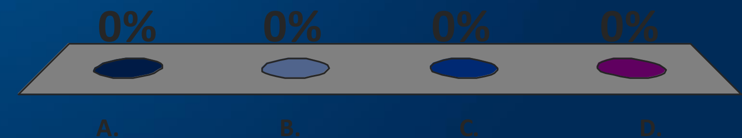
Case 1:

8 m/o starting to crawl fell striking the leg of a coffee table



The appropriate care of this wound is:

A. This wound requires nothing and will heal without intervention. Patient can be safely sent home.
B. Referral to the Emergency Department for sutures.
C. Referral to the Emergency Department for CT Head and sutures.
D. Wound care in the clinic.



Rady Children's Specialists of San Diego

Rady Children's Hospital San Diego

The appropriate care of this wound is:

A. This wound requires nothing and will heal without intervention. Patient can be safely sent home.
B. Referral to the Emergency Department for sutures.
C. Referral to the Emergency Department for CT Head and sutures.
D. Wound care in the clinic.

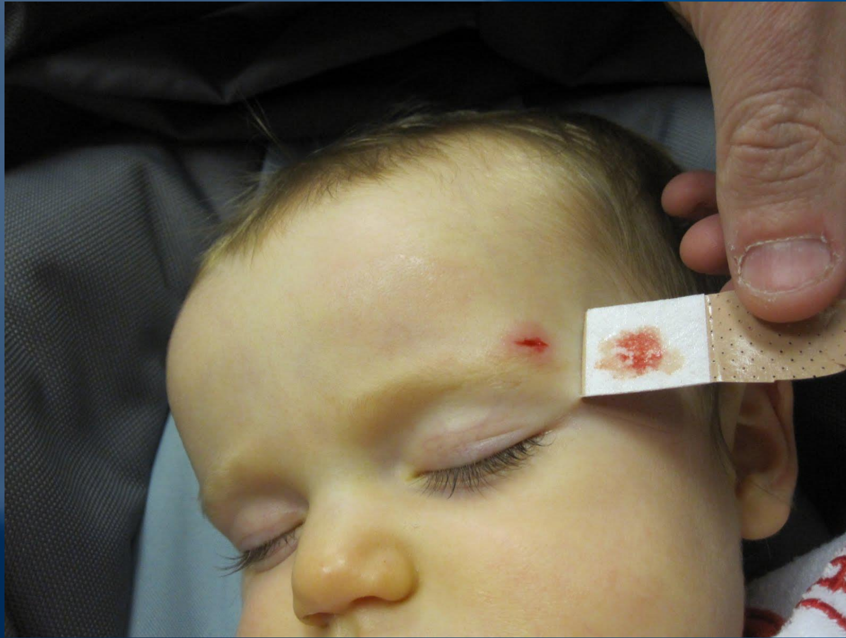
Case 1

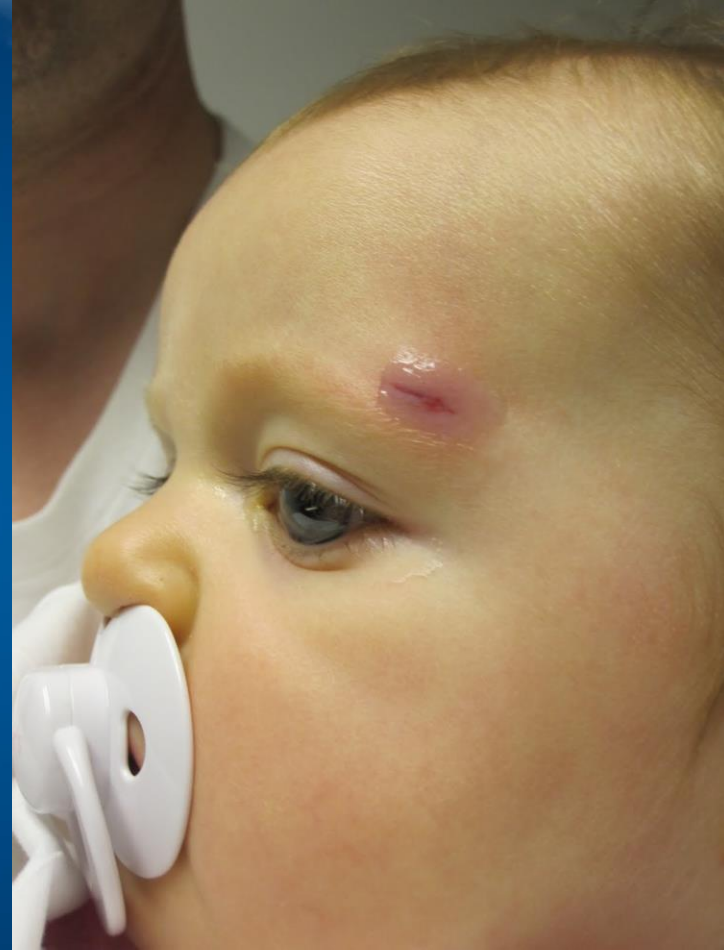
Laceration Repair: 2-octylcyanoacrylate (Dermabond®)

- Indication
  - Short, linear, low-tension wounds that can be manually approximated easily or with steri-strips

- Technique
  - Control bleeding, cleanse and allow to wound dry
  - Crush the ampule
  - Use gloves or instruments to approximate wound
  - May use ¼” steri-strips to approximate
  - Apply in a single layer

Case 1





Dermabond Repair: Pearls

- Antibiotic ointment/petroleum jelly
  - Keep hair out of way
  - Apply on instruments
  - Apply around the eye
- Place in syringe for fine tip application or purchase high viscosity version
- Warm sensation may occur
- Avoid gravity
- Keep child from touching or wound touching anything nearby
- Use steri-strips to approximate wound

Dermabond Repair: Pearls

Dermabond Repair: Pitfalls

- Unintended closures/attachments
- Hypersensitivity reactions
- Poor technique
- Limited tensile strength
  - Avoid in skin over joints
- Unable to use on mucous membranes
- Crush/stellate injuries difficult to approximate

Case 2

8 y/o boy was trying to clean his penis

Rady Children's Specialists of San Diego

Rady Children's Hospital San Diego

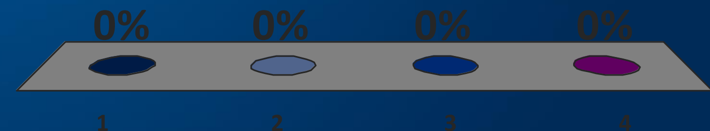
How much time will it take to treat this condition?

A. 5 minutes

B. 60 minutes

C. 30 minutes

D. The time it takes to get to the Emergency Department



Rady Children's Hospital San Diego

How much time will it take to treat this condition?

A. 5 minutes

B. 60 minutes

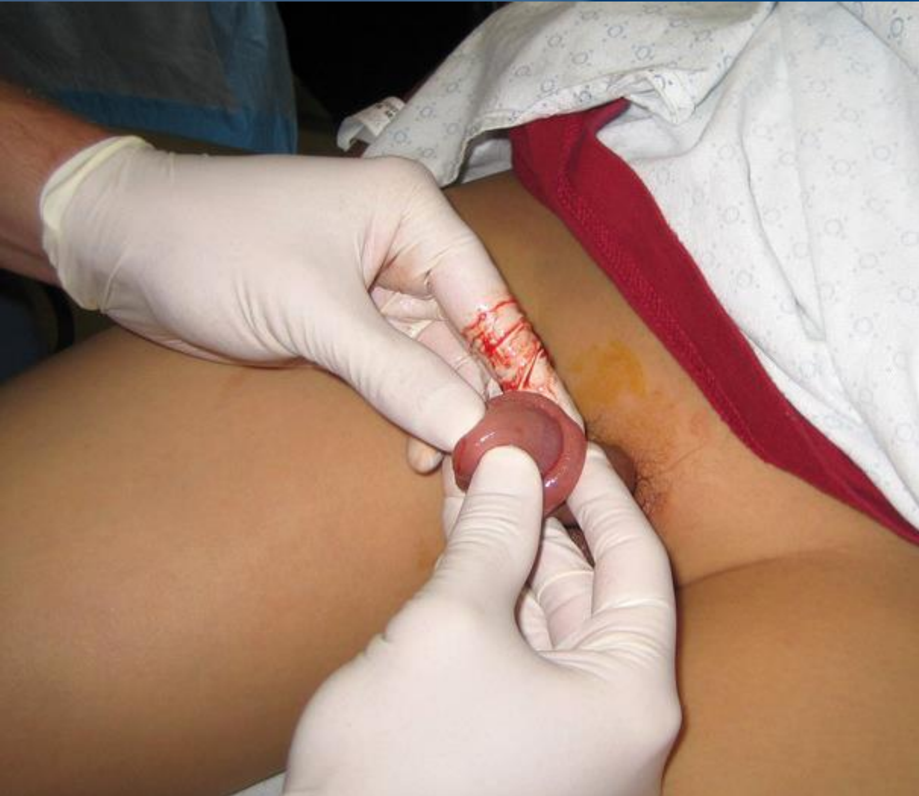
C. 30 minutes

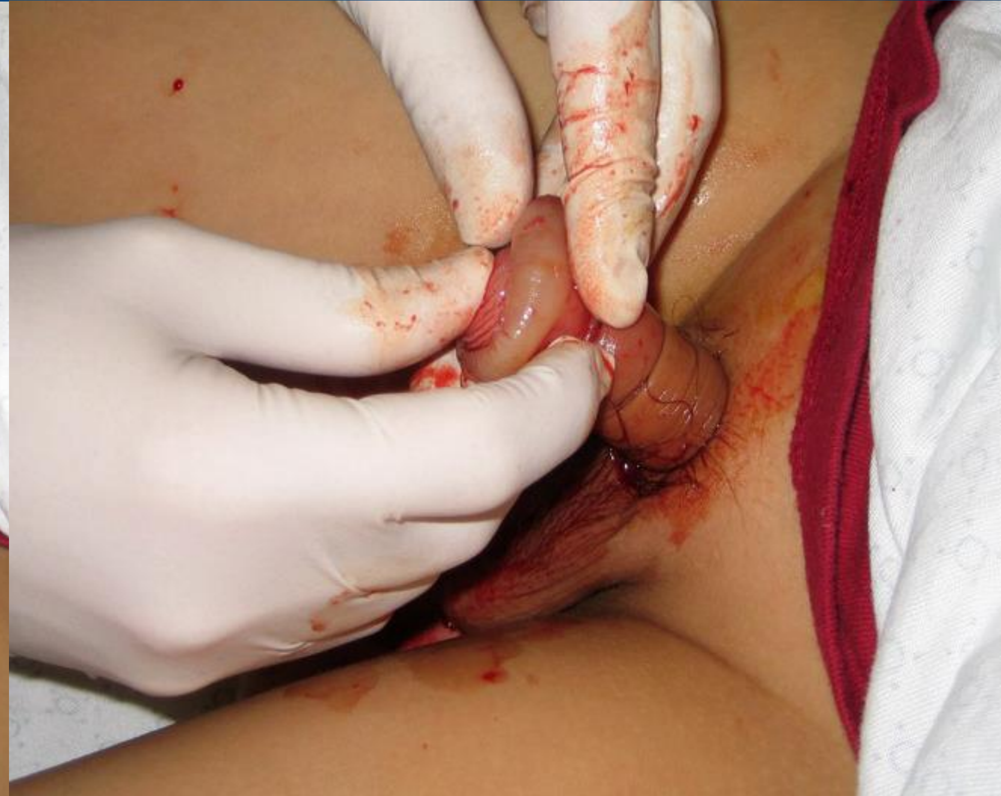
D. The time it takes to get to the Emergency Department

Paraphimosis Reduction

- Technique
  - Oral pain medication
  - Topical anesthetic gel or cream
  - Firm pressure over the edematous tissue for 10-15 minutes
  - Position the thumbs on both sides of the urethral meatus and the index and middle fingers proximal to the phimotic ring
  - Slow and steady pressure will easily reduce the paraphimosis
  - May take 20-30 minutes
  - Patience without tearing the tissue

Paraphimosis Reduction





Paraphimosis Reduction: Pearls

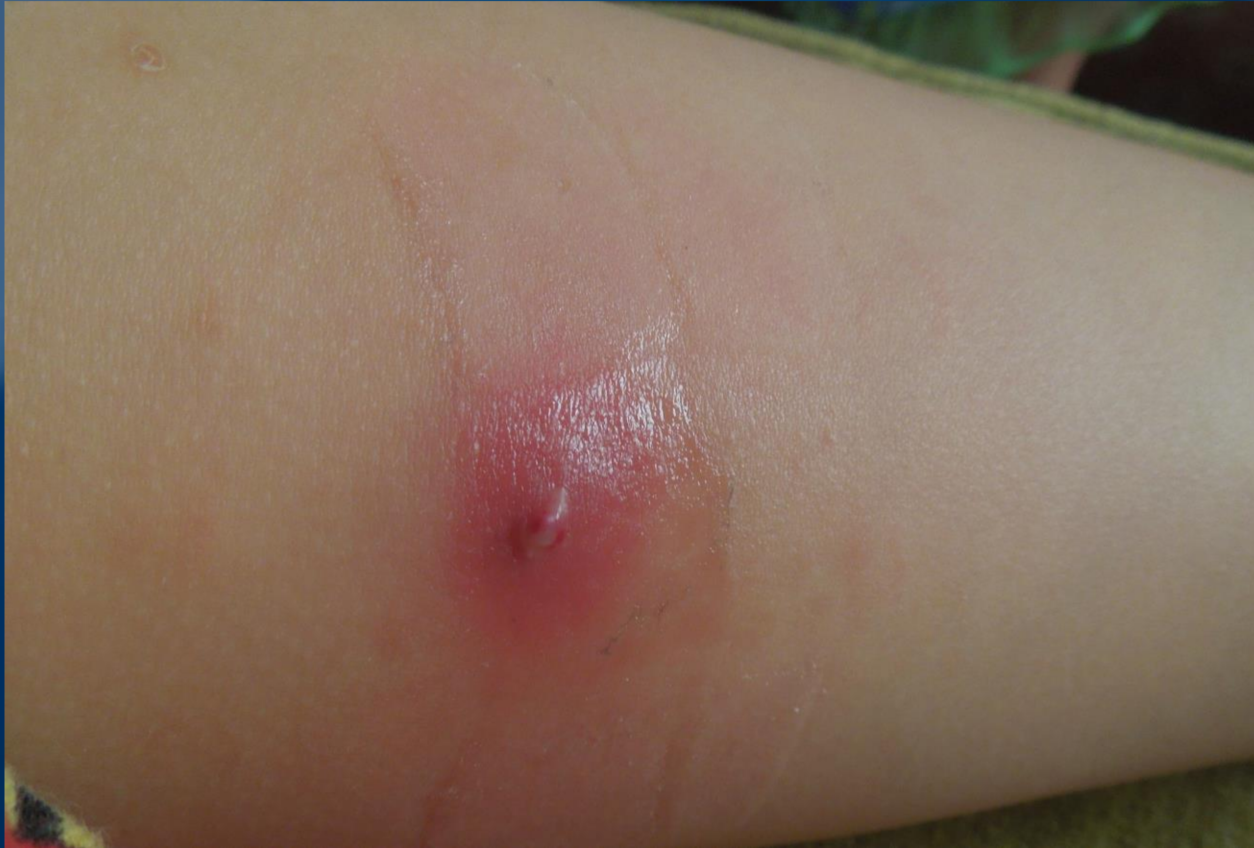
- Apply pressure for 10-15 min over edematous tissue
- Oral pain medications
- Application of viscous lidocaine and sugar
- Compression with gauze or Coban
- Avoid Force and tearing tissue
- Patience
- If unable to do on first attempt refer to the Emergency Department
- Consider urology referral

Paraphimosis Reduction: Pitfalls

- Inadequate pain control
- Unable to reduce requiring further intervention
  - Dorsal slit, emergent circumcision
- Penile or foreskin lacerations or tears
- Bleeding

Case 3

1 y/o “bit” by a spider 3 days ago



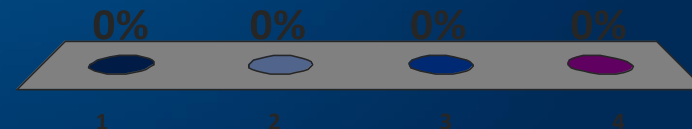
What is the most common etiology of this condition?

A. Brown recluse spider

B. Skin Flora

C. Black Widow Spider

D. Orb weaver spider



What is the most common etiology of this condition?

A. Brown recluse spider

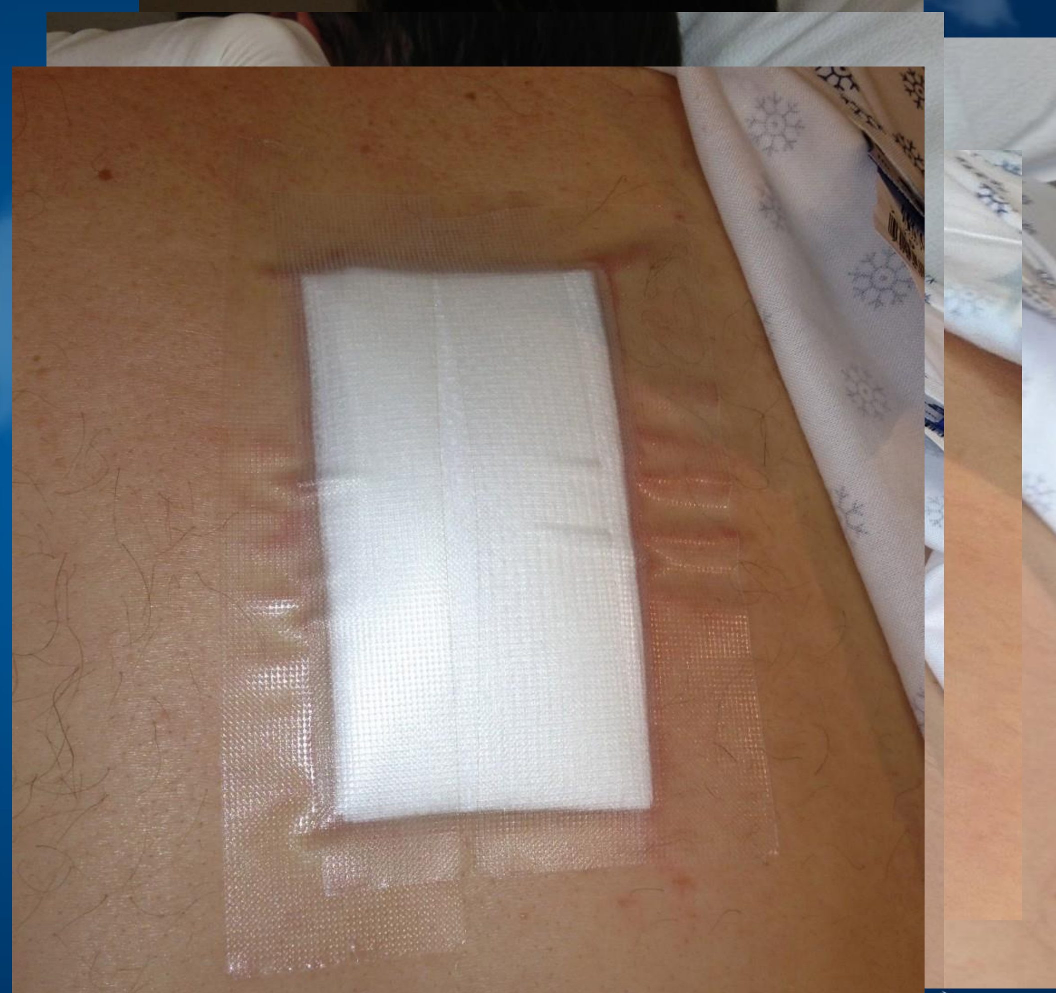
B. Skin Flora

C. Black Widow Spider

D. Orb weaver spider

Abscess I&D

- Technique
  - Topical anesthesia followed by 1% lidocaine with epinephrine
  - Incision with 11 blade
  - Copious Irrigation
  - Pack-controversial
  - Seal



Abscess I&D: Pearls

- Apply ELA-Max (4% liposomal lidocaine) prior to injection/incision
- May not need further intervention

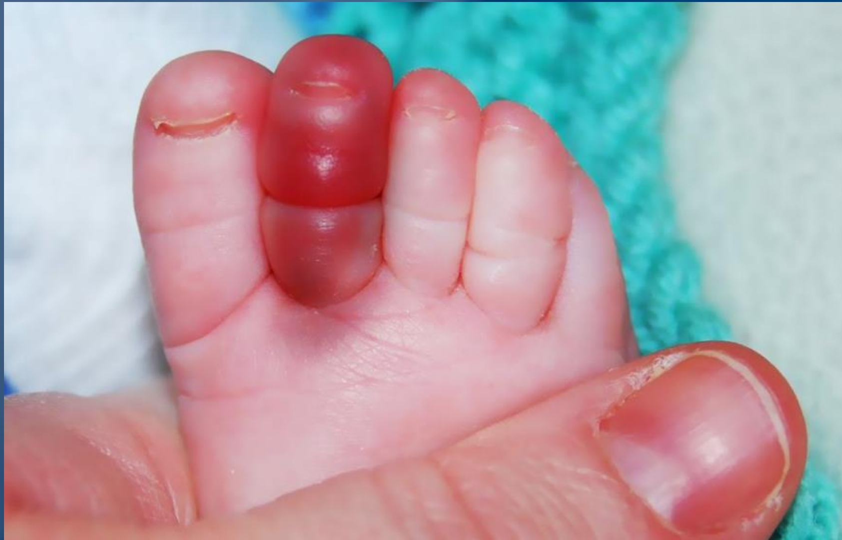
Abscess I&D: Pitfalls

- Inadequate incision/drainage
- Caution near vessels, reproductive structures
- Persistent bleeding
- Iatrogenic seeding of bacteria

Abscess post I&D: To treat or not to treat?

- Severe or extensive disease (e.g., multiple sites of infection)
- Rapid disease progression and associated cellulitis, signs and symptoms of systemic illness
- Associated coexisting conditions or immunosuppression
- Very young age
- Abscess in an area difficult to drain (e.g., face, hands, or genitalia)
- Associated septic phlebitis
- Abscess that does not respond to incision and drainage alone

Case 4



- 2 mo fussy infant
- Parents attempted removal of threads prior to arrival

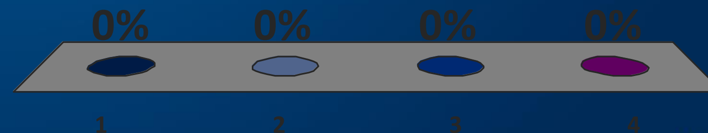
What is the most common cause of this injury?

A. Pet Hair

B. Mother's Hair

C. Thread from Clothing

D. Child Abuse



What is the most common cause of this injury?

A. Pet Hair

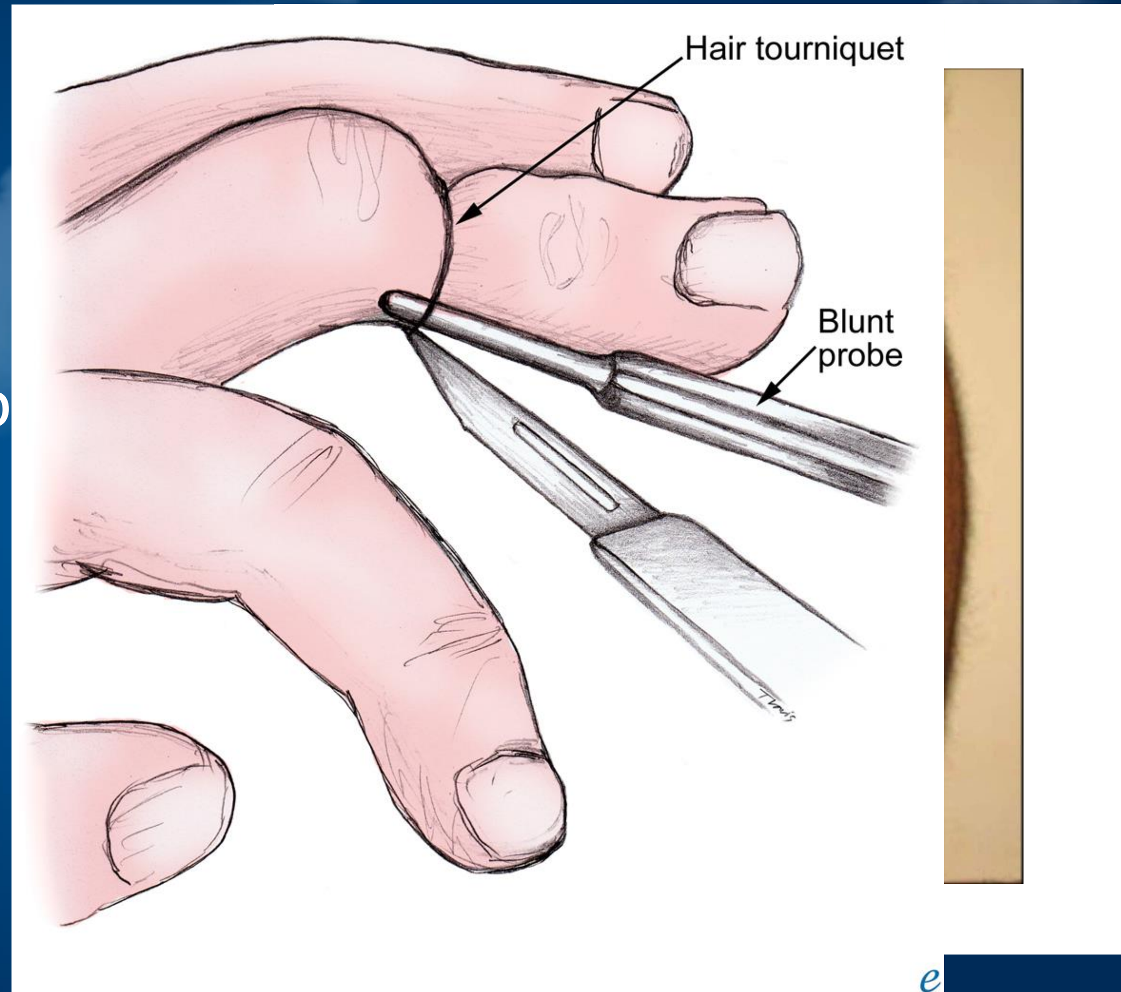
B. Mother's Hair

C. Thread from Clothing

D. Child Abuse

Hair Tourniquet Removal

- Technique
  - Unwrapping
  - Apply Nair®
  - Blunt probe metho
  - Incision



Hair Tourniquet Removal: Pearls

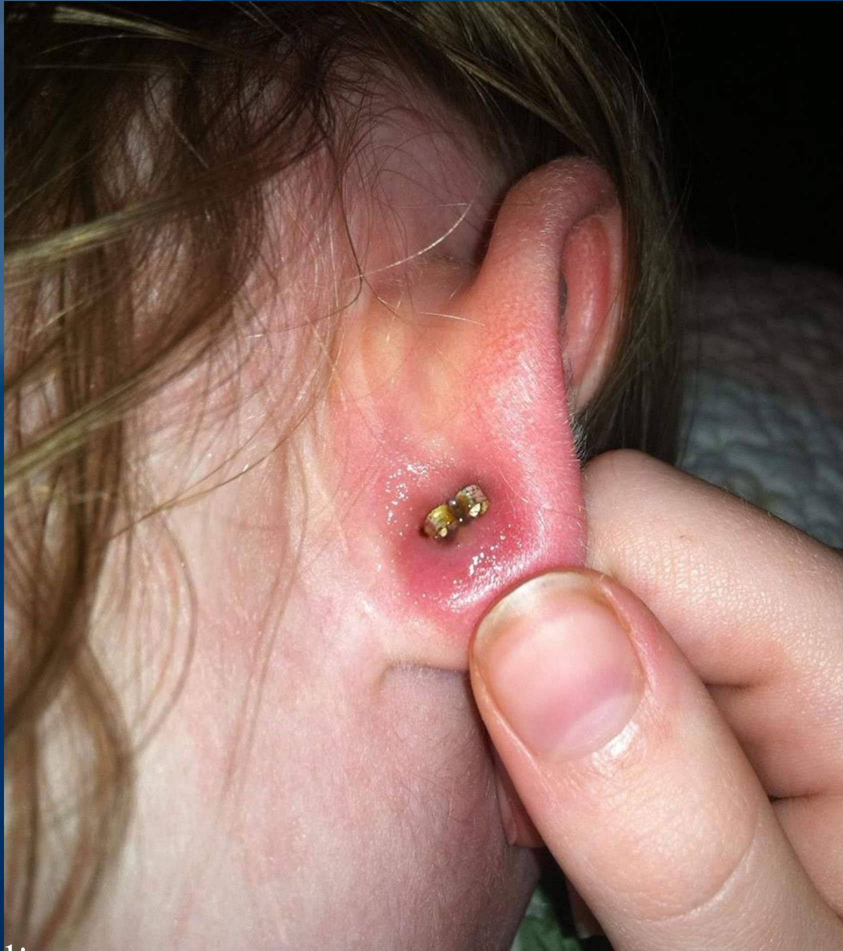
- Document neurovascular status, tendon function
- Obtain a urology consultation if involves the penis/clitoris
- Antibiotic therapy should be considered for patients who are immunocompromised, or have contaminated wounds
- Consider child neglect or abuse if knot is noted

Hair Tourniquet Removal: Pitfalls

- Consider surgical consultation if significant tissue edema, distorted anatomy, necrosis from prolonged injury, or uncertainty about the completeness of the removal

Case 5

10 y/o with recent ear piercing has been scratching at her ear



Embedded Earring Removal

Technique

- Sterilize the area with betadine
- Inject area with lidocaine 1%
- Toothed forceps, dilate opening, pull the embedded earring out

Embedded Earring Removal

Pearl/Pitfalls

- Incision not necessary
- Anesthetize!
- Control bleeding with pressure
- Referral to ENT if unable to remove
- Control infection with oral antibiotics

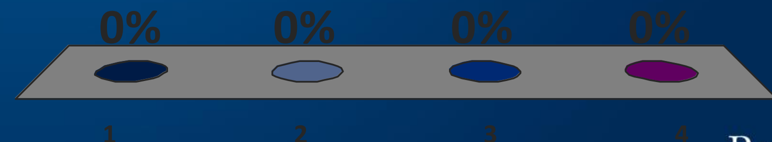
Case 6

So this happened…

Boy in white shirt presented with decreased movement of his left arm

What is the mechanism of this injury?

A. Subluxation
B. Dislocation
C. Fracture
E. None of the Above



What is the mechanism of this injury?

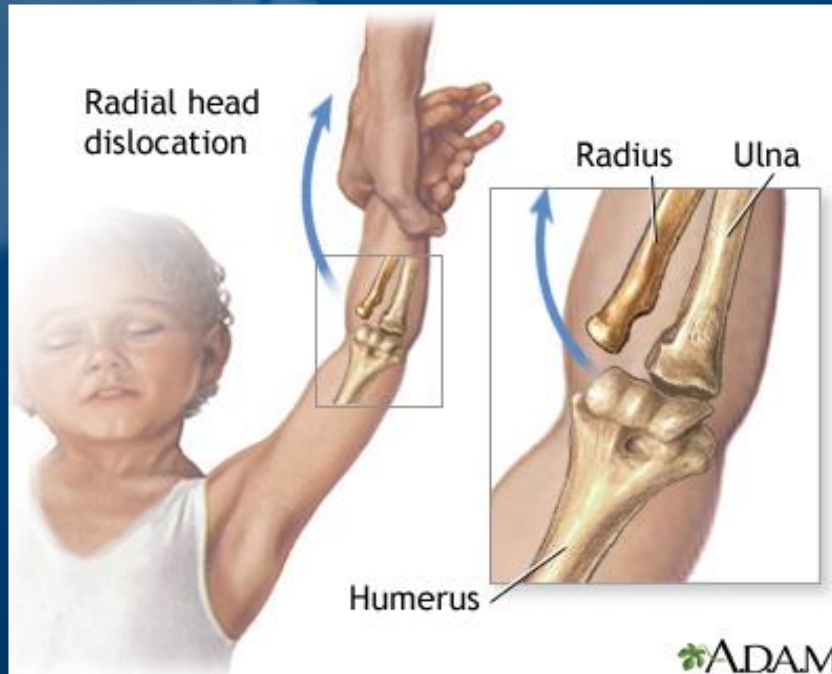
A. Subluxation

B. Dislocation

C. Fracture

E. None of the Above

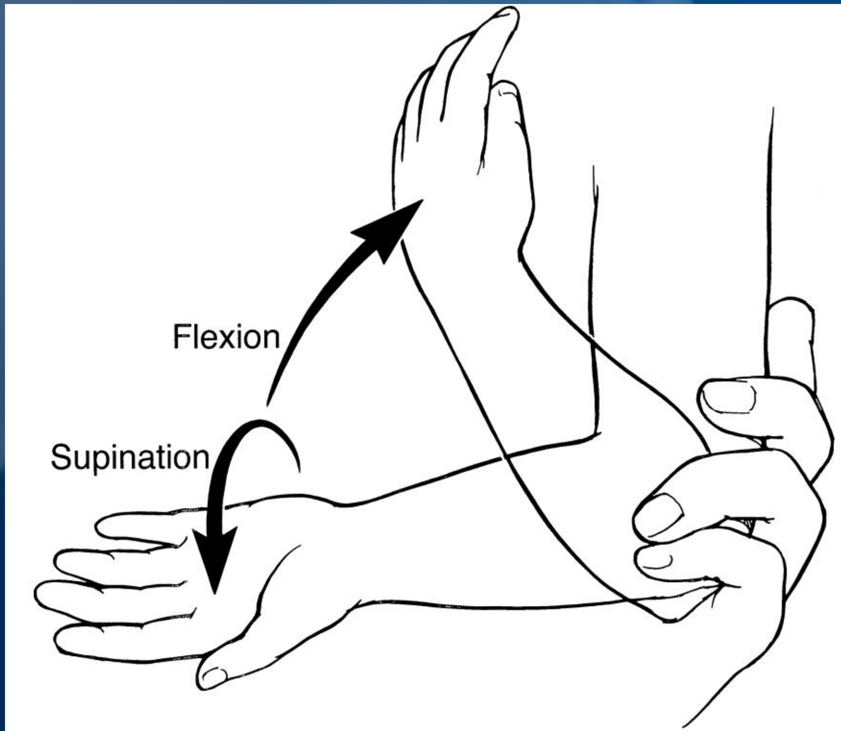
Radial Head Subluxation “Nursemaid’s Elbow”

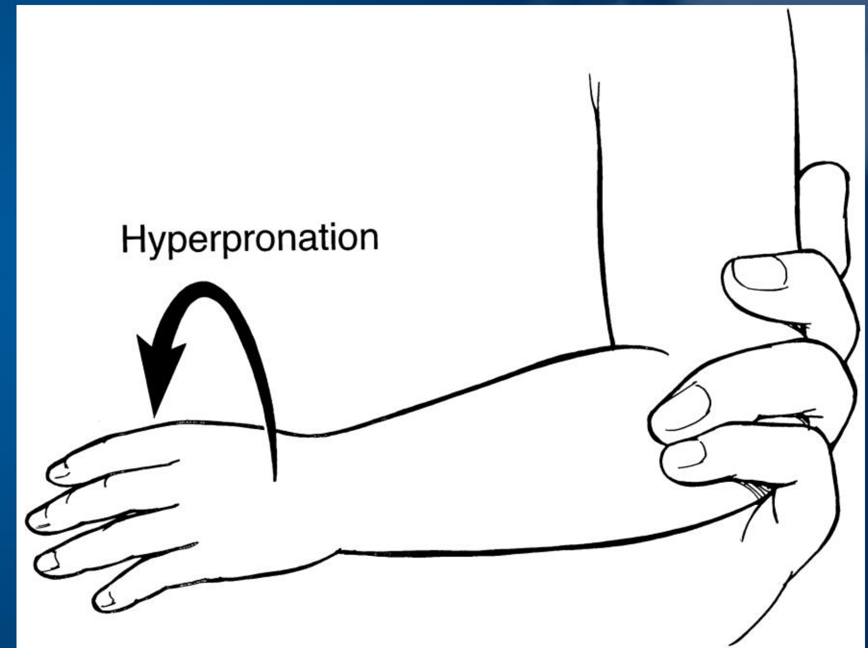


Rady Children's Specialists of San Diego

Rady Children's Hospital San Diego

Reduction of Subluxed Radial Head





Reduction of Subluxed Radial Head: Pearls

- Not usually painful
- May not always feel a "pop"
- Walk away an observe from a distance
- Utilize distraction to confirm use
- Educate parents on prevention and treatment
- Verify full use use prior to sending home

Reduction of Subluxed Radial Head: Pitfalls

- Underlying fracture
- Unable to reduce
- Failure to identify abuse
- Should return to full function immediately

When you Need to Refer to RCHSD ED

1. Call ahead and ask to talk to the PEM attending before sending patients
2. Use EMS for any patient with airway concern, respiratory distress, significant pain requiring narcotics, or life/limb threatening condition
3. MOOD (Medical Officer of the Day) available 24 hours a day to help determine need for ED evaluation versus outpatient referrals
4. All referrals placed in EPIC
5. For orthopedic injuries, place splint and give pain medications
6. NPO for any possible procedures or evaluation of abdominal pain
7. Elective MRI not available
8. Routine specialty consultation not available
9. Manage expectations for visit and what will happen upon arrival

Take Home Pearls

- Use caution with dermabond “leakage”
- Hyperpronation more successful in radial head subluxation reduction
- Consider Nair hair removal for hair tourniquet removal
- Apply ELA-max® prior to I&D
- Treat pain and prepare patients for Emergency Department Visit(NPO)
- We are here to help 24 hours a day

emergency medicine

ideal

reality

www.iddxblog.com 2008

Thank You!

Keri Carstairs, MD
858-966-8800
kcarstairs@rchsd.org