My Favorite Bedside Procedures: Tips and Tricks

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Disclosure

I have no financial interests or relationships to disclose.

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Learning Objectives

1. Become familiar with a variety of options for acute wound care
2. Provide atraumatic methods of removing ear and nose foreign bodies
3. Efficiently evaluate and treat peritonsillar abscesses.
4. Recognize the myriad of ways to use tranexamic acid (TXA)
5. Skillfully manage common finger injuries and insults
6. Provide evidence-based management of cutaneous abscesses

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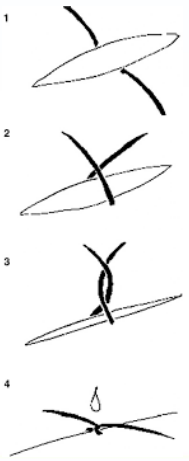
Suture? Staples?

4

Hair Opposition Technique for Scalp Lacerations



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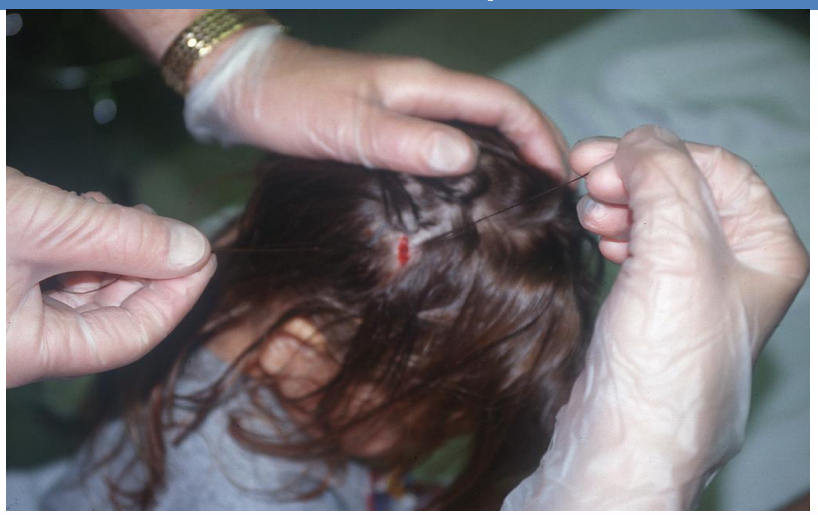
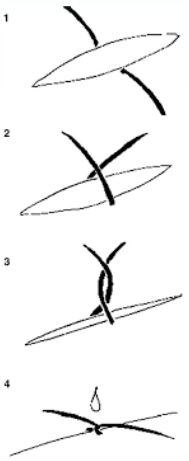
Hair Opposition Technique for Scalp Lacerations





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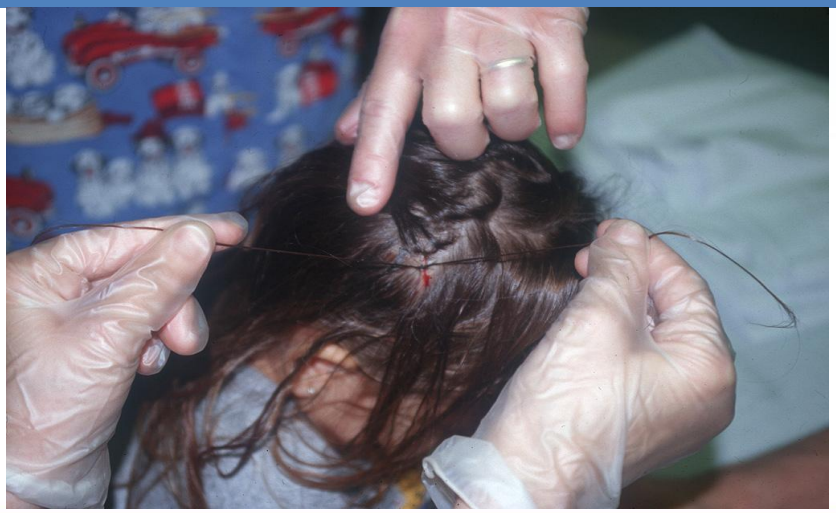

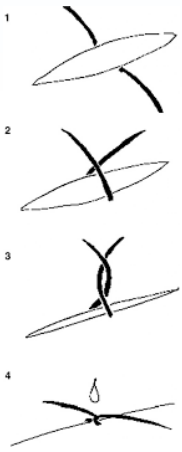

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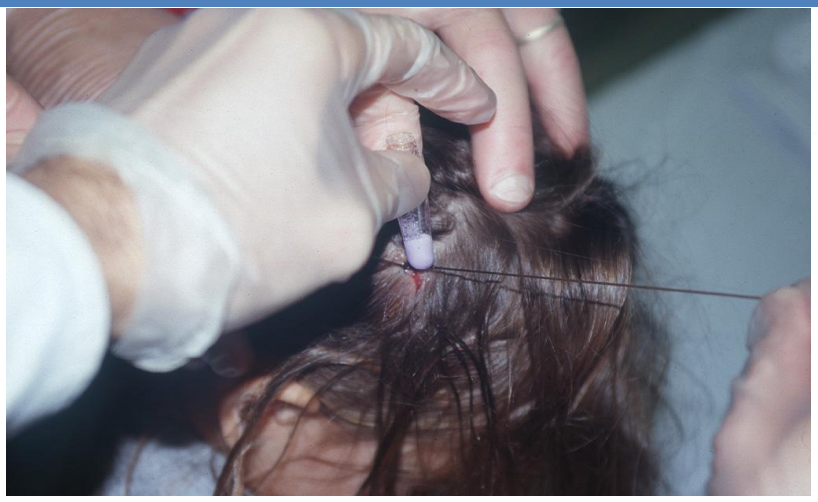
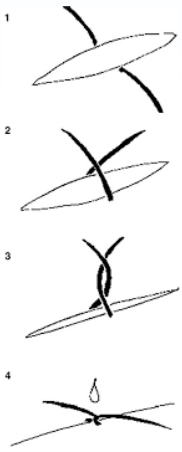
Hair Opposition Technique for Scalp Lacerations





[1]*Davies MJ, Injury 1988; 19:375,* [2]*Hock MOE, et al. Ann Emerg Med 2002; 40: 19-26*

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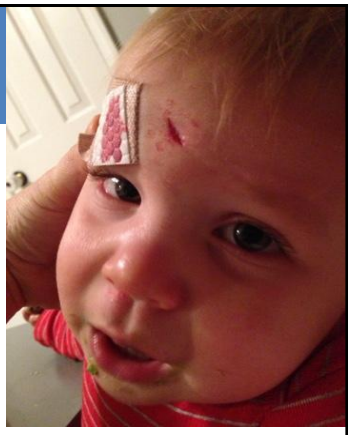
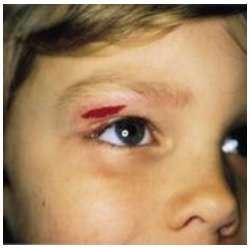
Tissue Adhesive Near the Eye

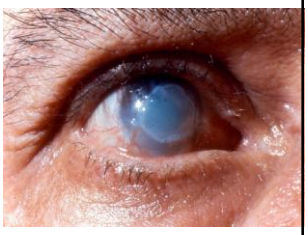
What do you do with wounds around the eye??





+

Accidental Instillation of Tissue Adhesive Into the Eye Can Cause Exothermic Corneal Burns



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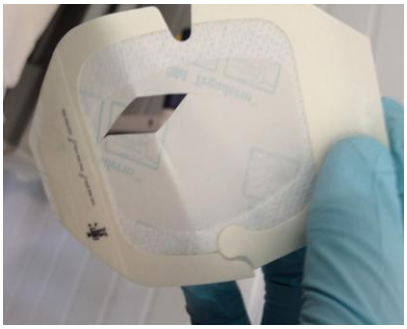
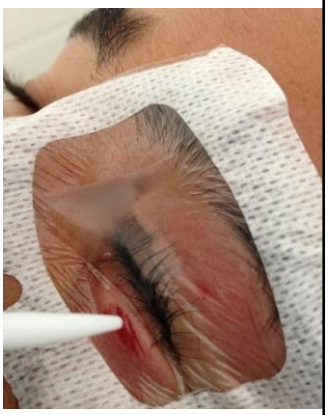
Tissue Adhesive Near the Eye



Before Removing the Backing from Tegaderm, Cut an Opening the Size of the Laceration

Remove the Backing and Position the Covering, Ensuring Firm Contact



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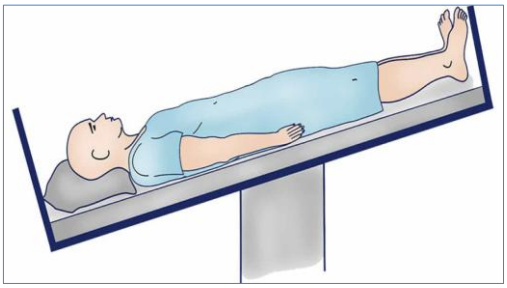
Tissue Adhesive Near the Eye

On the forehead.....think, Trendelenburg!



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Tissue Adhesive "In" the Eye

But what do you do if you accidently glue the eyelids together?

Answer:
Petroleum based antibiotic ointment

Example: erythromycin ophthalmic ointment

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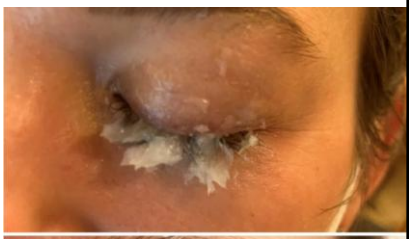
Artificial Nail Glue in the Eye

- **Nail glue** bottle similar to Rx eye drop bottles
- reflexive blinking pushes the glue to the eyelid margins
  ➔ eyelashes/eyelid margins sticking together



Before and after application of topical antibiotic ointment to remove inadvertent nail glue causing eyelid adhesion

Answer: petroleum-based eye ointments (eg. Bacitracin, erythromycin)

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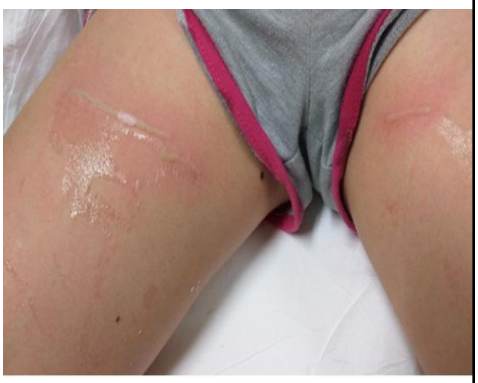
Artificial Nail Glue on the Skin

- Nail glue bottle similar to Rx eye drop bottle
- Same goes for “super glue”



Answer: petroleum-based eye ointments (eg. Bacitracin, erythromycin)

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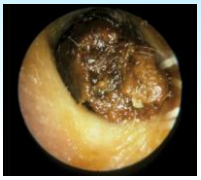
ARS Question #1

"Cerumen Impaction....Ugh!!!" What Is Your "Go To"?



A. Hydrogen peroxide
B. docusate sodium (Colace)
C. triethanolamine polypeptide (Cerumenex®)
D. carbamide peroxide (Debrox®)

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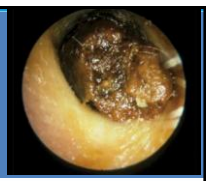
"Cerumen Impaction....Ugh!!!" What Is Your "Go To"?



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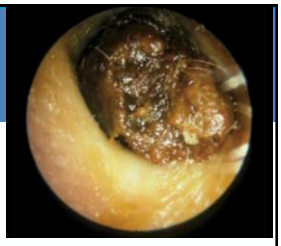
"Cerumen Impaction....Ugh!!!"



What Is Your "Go To"?

- Study #1: double-blind, randomized:

	Docusate (Colace) n=27	triethanolamine (Cerumex) n=23
Result: TM visualized	5 (19%)	2 (9%)

- Study #2: double-blind, randomized:

	(Colace) n=34	(Cerumex) n=30
Result: TM visualized	18 (53%)	13 (43%)

[1]Singer AJ, et al. Ann Emerg Med. 2000;36(3):228-32 [2]Whatley VN, et al. Arch Pediatr Adolesc Med. 2003; 57(12):1177-80

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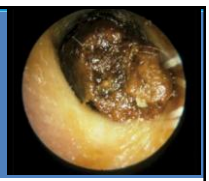
"Cerumen Impaction....Ugh!!!"



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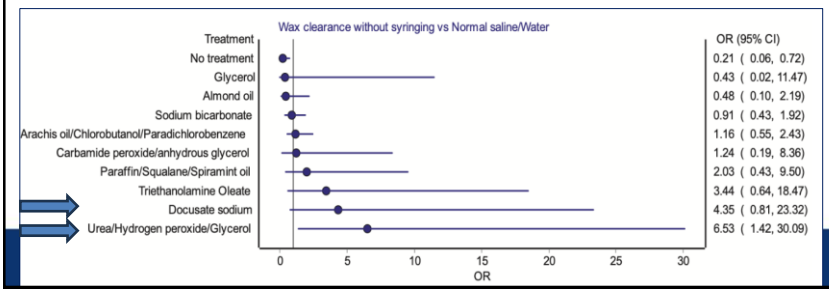

25 studies, meta-analysis

Cerumenolytics with or without manual extraction for impacted earwax: A network meta-analysis of randomised clinical trials *Clinical Otolaryngology.* 2021;46:464–473
Kannan Sridharan[1] | Gowri Sivaramakrishnan[2]

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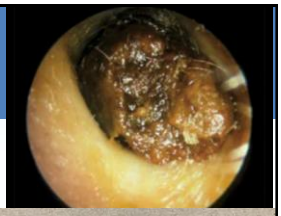
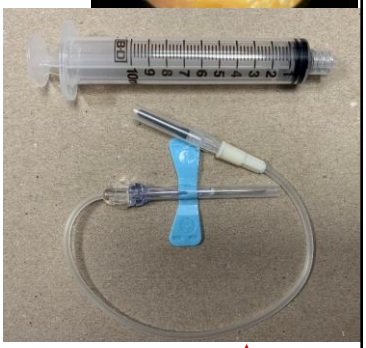
"Cerumen Impaction....Ugh!!!"



Avoid trauma when irrigating

My suggestion:



Cut tubing here

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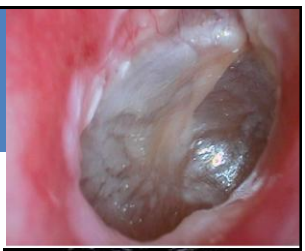
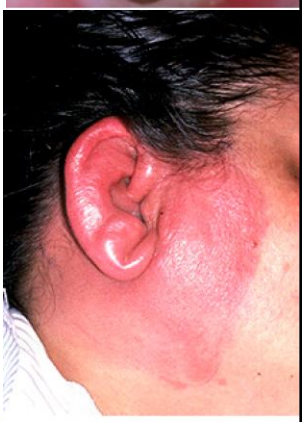
Otitis Externa
"Swimmer's Ear" Pearls





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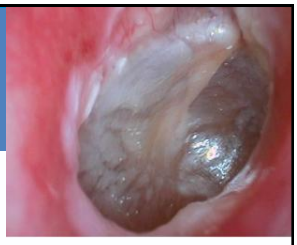
Otitis Externa
”Swimmer’s Ear” Pearls



- **Ciprodex (cipro + dexa) – generic……$55**
- **Ofloxacin – generic ……$21**
- **Neomycin-polymyxin-HC solution……$29**
- **Neomycin-polymyxin-HC suspension……$25**
- **Tobramycin + dexa Ophth suspension……$28**
- **Ciprofloxacin 0.3% eye drops……$13**

Average Retail Cost GoodRx with coupon, accessed 4/25/26

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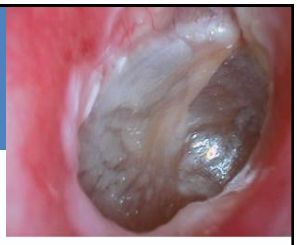
Otitis Externa
”Swimmer’s Ear” Pearls



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The solution to the problem is the ”suspension”

Average Retail Cost GoodRx with coupon, accessed 4/25/26

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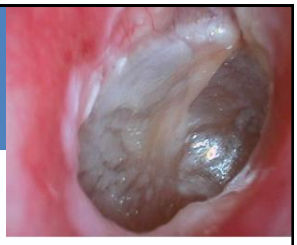
Otitis Externa
"Swimmer's Ear" Pearls



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The solution to the problem is the "suspension"

Eye drops can be used in the ear,
Ear drops CANNOT be used in the eye

Average Retail Cost GoodRx with coupon, accessed 4/25/26

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Foreign Body in the External Canal

- Depends on type and shape of foreign body
- Irrigation, Alligator forceps, suction
- Dermabond to blunt end of cotton-tipped applicator[1]

Figure 1 Foreign body (plastic pearl) removed in case 2 using cyanoacrylate glue. The pearl is still adherent to the hollow plastic tube used in the extraction.

[1]Benger JR, Davies PH. J Accid Emerg Med. 2000 Mar;17(2):149-50.

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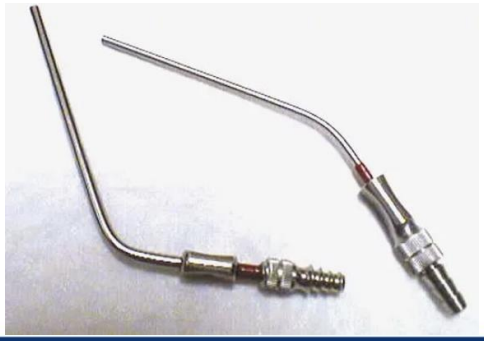
Foreign Body in the External Canal

- Depends on type and shape of foreign body
- Irrigation, Alligator forceps, suction
- Dermabond to blunt end of cotton-tipped applicator[1]

- **Insects…UGH!**

First, submerge in lidocaine ….then suction



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Children Put the Darndest Things in Their Nose

- Beads, nuts, chalk, eraser heads, pebbles, corn…

Fig: marble

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Children Put the Darndest Things in Their Nose

- Beads, nuts, chalk, eraser heads, pebbles, corn…

- *"Parent's kiss"* **Least invasive**
- *Positive pressure ventilation with BVM*

- *Balloon catheters*
- *Suction*
- *Bayonet/Alligator forceps*
- *Dermabond*

Fig: marble

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"Parent's Kiss"

- First described in 1965
- Occlude unaffected nostril
- Parents lips seals child's mouth
- Provides puff

Observational study—
20 of 31 children was successful[1]

*Best in young children, small round objects

[1]Pirohit N. Ann R Coll Sur Engl 2008

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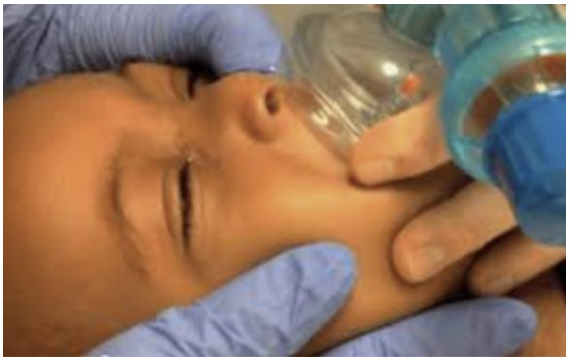
"Positive Pressure with BVM"



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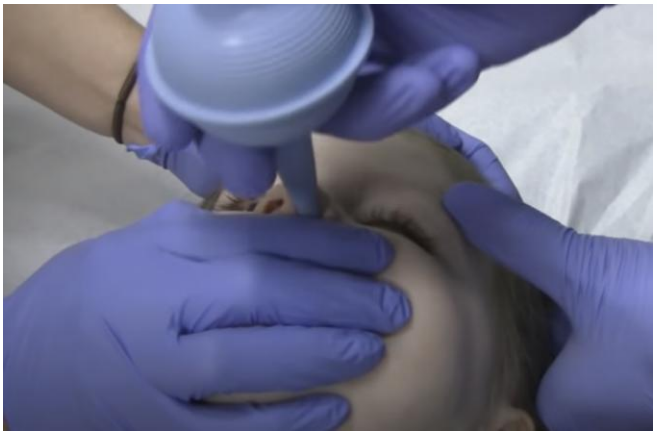
"Positive Pressure with Bulb Syringe"



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Children Put the Darndest Things in Their Nose

- Beads, nuts, chalk, eraser heads, pebbles, corn…

- *"Parent's kiss"*
- *Positive pressure ventilation with BVM*

Least invasive

- ***Balloon catheters***
- ***Suction***
- ***Bayonet/Alligator forceps***
- ***Dermabond***

Go with best first option….
And provide anesthetic + decongestant

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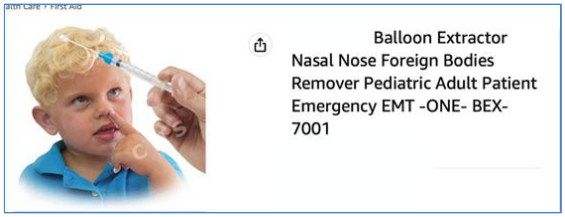
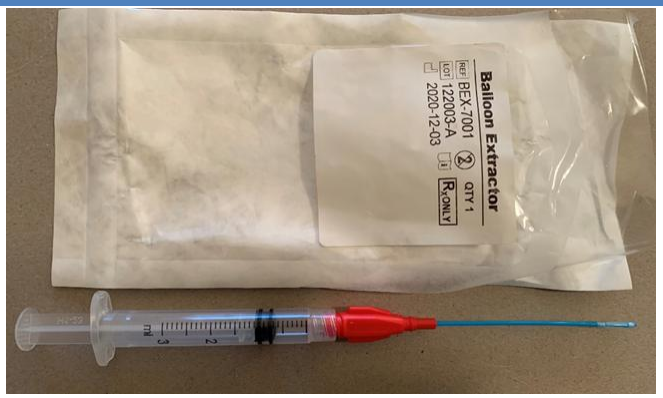
Children Put the Darndest Things in Their Nose

- ***Balloon catheters***
- *Suction*
- *Bayonet/Alligator forceps*
- *Dermabond*





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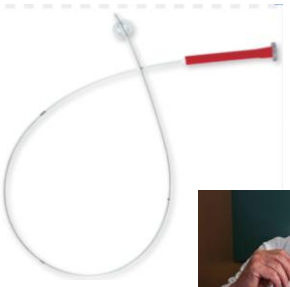
Children Put the Darndest Things in Their Nose

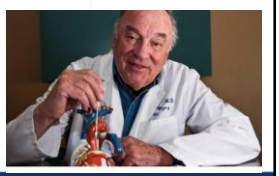
- ***Balloon catheters*----------→**
- *Suction*
- *Bayonet/Alligator forceps*
- *Dermabond*

In the OR

Fogarty catheter

Age (y)	Size of Fogarty Catheter (F)	
	For boys	For girls
0-1	3	3
1-2	3	3
2-4	3	3
4-6	4 or 5	4 or 5
6-8	4 or 5	4 or 5
8-10	4 or 5	4or 5
10-12	4 or 5	5
>12	5 or 6	6





Dr. Thomas Fogarty

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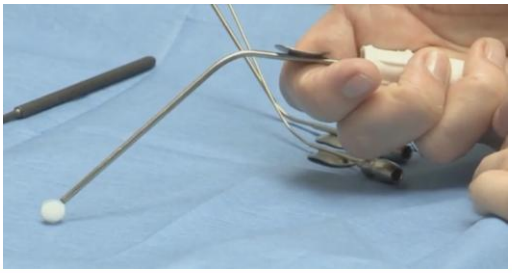
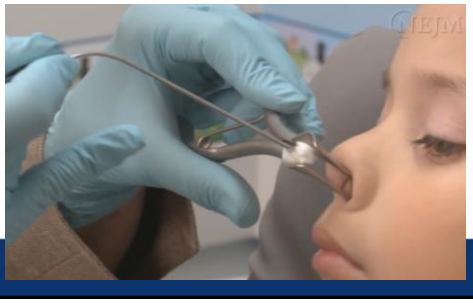
Children Put the Darndest Things in Their Nose

- *Balloon catheters*
- ***Suction***
- *Bayonet/Alligator forceps*
- *Dermabond*





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Children Put the Darndest Things in Their Nose

- *Balloon catheters*
- *Suction*
- ***Bayonet/Alligator forceps***
- ***Dermabond***

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Children Put the Darndest Things in Their Nose

IMPORTANT:

- **Any f.b. potential to dislodge posteriorly and aspirate**
- **Button batteries are an EMERGENCY**

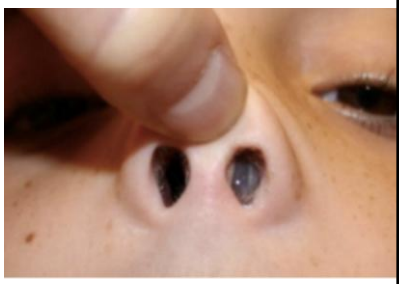

Fig: marble

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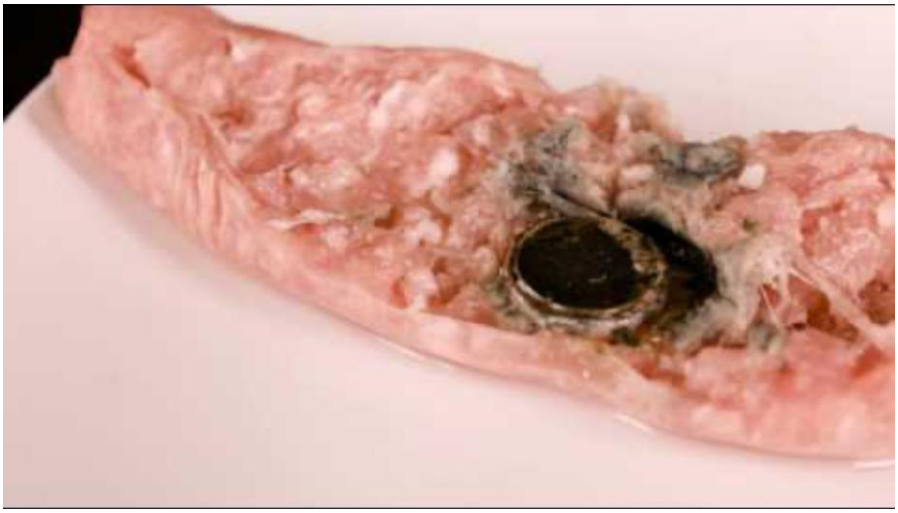
Button Batteries Are an Emergency!!



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Managing Epistaxis: Anterior Epistaxis

Cotton ball/pledget soaked in:

- Neo-Synephrine (phenylephrine HCL)
- Epinephrine
- Tranexamic acid (TXA)

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Epistaxis and Tranexamic Acid (TXA) (and Other Uses for TXA)

1) Zahed et al. Am J Emerg Med, 2013
123 pts randomized to:

	TXA pledget	vs	epi-soaked pledget
Cessation @10min	71%		31%
ED discharge in 2hr	95%		6%

2) Zahed et al. Acad Emerg Med, 2018
Same results with 124 pts ***on antiplatelets***

3) **Efficacy of topical tranexamic acid in epistaxis: A systematic review and meta-analysis**
Am J Emerg Med 2022 51: 169-75
Rajesh Naidu Janapala [1], Quincy K Tran [2], Jigar Patel [1], Esha Mehta [1], Ali Pourmand [3]

7 randomized trials, 1 retrospective, 1299 patients
- TXA 3.5x more likely to achieve bleeding cessation
- 63% less likelihood of returning due to bleeding

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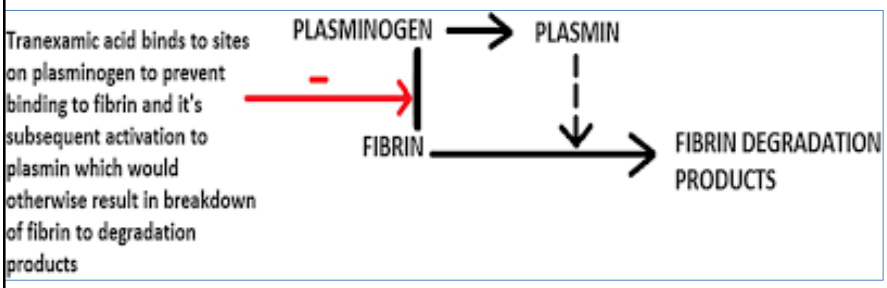
Tranexamic Acid (TXA)

Utako Okamoto (1 April 1918 – 21 April 2016)
-in quest to find drug to decrease post-partum hemorrhage deaths

- First discovered epsilon aminocaproic acid (Amicar)
- Then....TXA (more potent **antifibrinolytic**)



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Tranexamic Acid (TXA): Off-Label Uses

- **Post-partum hemorrhage:** **WOMAN Trial (Lancet, 2017)**

Methods: international *(193 hospitals, 21 countries)*, 20,060 woman with PPH, double-blind, randomized to:

Results:	TXA *(n=10,051)*	placebo *(n= 10,009)*
maternal mortality	n=155, **1.5%**	n= 191, **1.9%**

TXA is included in WHO's list of essential medicines

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Tranexamic Acid (TXA)

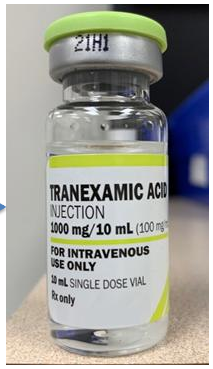
Brand name: Lysteda

FDA approved:

1) Heavy menstrual bleeding (2009)
   Generic: $40-50
   *Brand name: 30 tabs (650mg) = $148
   ** in UK – its OTC

2) Hemophiliacs and dental extraction

$5.00 →



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Tranexamic Acid (TXA): Multiple Uses Approved and Off-Label*

- **Epistaxis***
- **Post-partum hemorrhage***
- **Heavy menstrual bleeding**
- **Dental extraction and hemophilia**

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Tranexamic Acid (TXA): Multiple Uses Approved and Off-Label*

- **Epistaxis***
- **Post-partum hemorrhage***
- **Heavy menstrual bleeding**
- **Dental extraction and hemophilia**
- **Secondary post-tonsillectomy bleeding***

Case report: 3 y/o male, 4 days S/P tonsillectomy

Schwarz W, et al. Ann Emerg Med, Mar 2019

44

Tranexamic Acid (TXA): Multiple Uses Approved and Off-Label*

- **Epistaxis***
- **Post-partum hemorrhage***
- **Heavy menstrual bleeding**
- **Dental extraction and hemophilia**
- **Secondary post-tonsillectomy bleeding***
- **Hemoptysis**

Methods: 47 pts. with hemoptysis, double-blind, randomized to:

Results:	nebulized TXA 500mg tid	placebo
cessation @ 5 days	96%	50%
Hospital LOS	5.7 days	7.8 days
Required invasive procedure	0%	18%

Ori W, et al. Chest, ***Dec 2018;*** *154: 1379-1384*

45

Tranexamic Acid (TXA): Multiple Uses Approved and Off-Label*

- **Epistaxis***
- **Post-partum hemorrhage***
- **Heavy menstrual bleeding**
- **Dental extraction and hemophilia**
- **Secondary post-tonsillectomy bleeding***
- **Hemoptysis***
- **Oral bleeding/Dental extraction**

1) Queiroz SIML, et al Clin Oral Investig 2018; 22: 2281-89
2) Zirk M, et al . J Craniomaxillofac Surg 2018; 46:932-936
3) Lu SY, et al. J Formos Med Assoc 2018 117: 979-986
4) Sanchez-Palomino P, et al. Med Oral Patol Oral Cir Bucal 2015; e616-20.

46

Tranexamic Acid (TXA): Multiple Uses Approved and Off-Label*

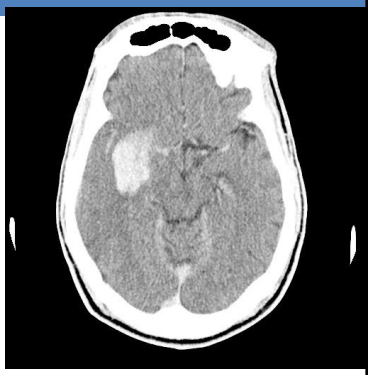
- **Epistaxis***
- **Post-partum hemorrhage***
- **Heavy menstrual bleeding**
- **Dental extraction and hemophilia**
- **Secondary post-tonsillectomy bleeding***
- **Hemoptysis***
- **Oral bleeding/Dental extraction***
- **Fingertip avulsion**

Ker K, Beecher D, Roberts I. Topical application of tranexamic acid for the reduction of bleeding. The Cochrane database of systematic reviews. 2013;7:CD010562

47

Tranexamic Acid (TXA): Multiple Uses Approved and Off-Label*

- **Epistaxis***
- **Post-partum hemorrhage***
- **Heavy menstrual bleeding**
- **Dental extraction and hemophilia**
- **Secondary post-tonsillectomy bleeding***
- **Hemoptysis***
- **Oral bleeding/Dental extraction***
- **Fingertip avulsion***
- **Post tPA intracranial hemorrhage***
- **And… in orthopedic and other surgery***



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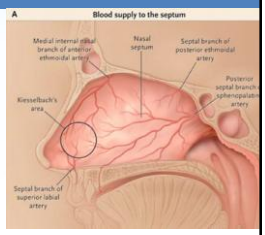
Reference: TXA Dosing

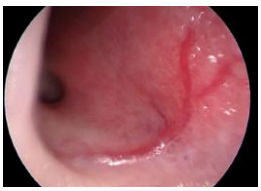
- **Major trauma:** 1 g in 100ml NS over 10 minutes, then infusion of 1 g in 250ml NS over 8 hours
- **Post-partum hemorrhage:** 1 g in 10 mL (100 mg/mL) IV at 1 mL per minute (i.e., administered over 10 minutes), with a second dose of 1 g IV if bleeding continues after 30 minutes. (WHO recommendation)
- **Hemoptysis:** 500mg (5ml) +/- 5ml NS nebulized tid
- **Post-tonsillectomy bleed:** 250mg (weight < 25kg), 500mg (> 25kg) nebulized
- **Post-tPA hemorrhage:** ?????

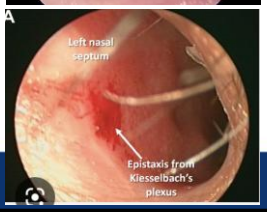
Back to Epistaxis.... The Anterior Bleed

Step 1:You have stopped the bleed (for now)....
(TXA + 1-4% lidocaine on a cotton ball)



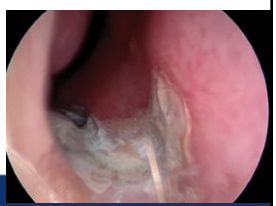
Step 2: Inspect... if anterior bleeding site: **cauterize!**





1) Do **NOT** proceed if active bleeding!!

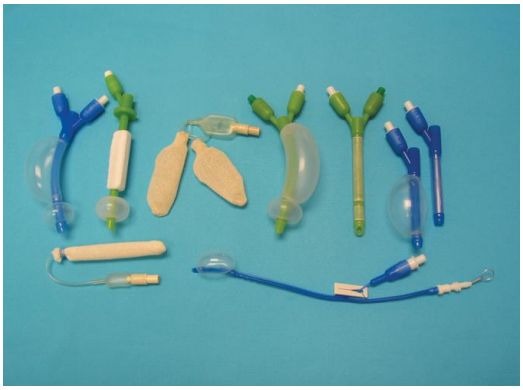
2) Hold cautery up to 30 seconds →



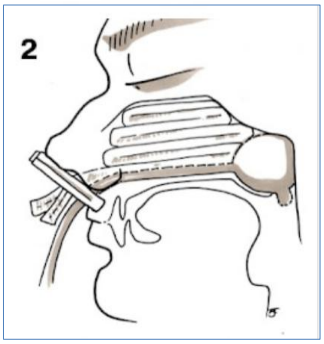
N Engl J Med 2021; 384:e101

Back to Epistaxis.... The Posterior Bleed

Option 1: Double balloon



Option 2: Foley catheter (+ anterior packing)



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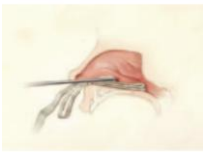

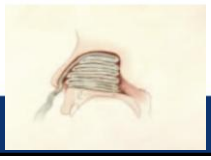

Do You Need to Place Patients with Packing on Prophylactic Antibiotics?

Background: Dogma says "yes". Theory: Prevent TSS

Methods: randomized trial, 154 pts with packing

Results:	**Amox-Clavulanate**	**no Abx**
	N=78	**N=76**

No difference – no cases of.. sinusitis, otitis, TSS

Pepper, C., et al, J Laryngol Otol 126(3):257, March 2012

52

Do You Need to Place Patients with Packing on Prophylactic Antibiotics?

Is antibiotic prophylaxis necessary for anterior epistaxis with packing? Insights from a large database

Quincy K. Tran, MD, PhD [a,b,d,*], Isha Vashee [b], Rohan Vanga [b], Samantha Camp [c], Melissa K. Rallo [c], Daniel Najafali [f], Laura J. Bontempo, MD, MEd [a], Ali Pourmand, MD, MPH [e]

Methods: Retrospective review, propensity-matched cohort study, **6302 patients** from an international (TriNetX) database. 12/04 – 12/24
(+) anterior nasal packing

Results:	+ Abx (n= 2737).	No Abx (n=2737)
Clinically significant infection	15 (0.5%)	10 (0.4%)

Am J Emerg Medicine 2025; 93: 64–72

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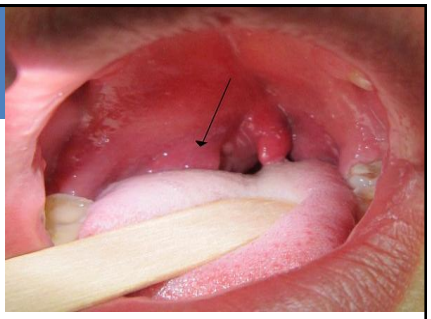
Peritonsillar Abscess

54

Peritonsillar Abscess

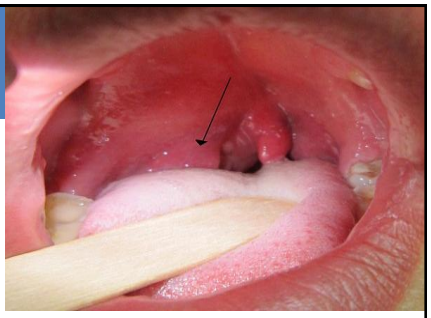


- Highest incidence: ages 20-40
- Pathogenesis –
  - ~~Streptococcal invasion of tonsil~~
  - Occlusion Weber glands
- Exam: odynophagia
  - Voice change
  - **trismus**

But what if you can't see the tonsils?

55

Peritonsillar Abscess



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  - ~~Streptococcal invasion of tonsil~~
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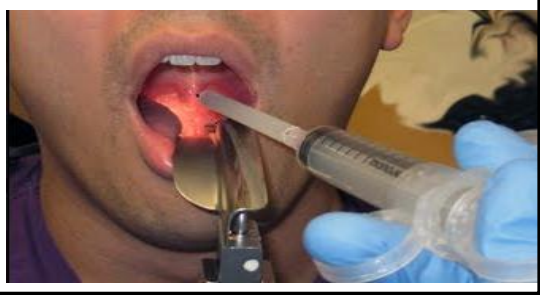
- Exam: odynophagia
  - Voice change
  - **trismus**

But what if you can't see the tonsils?

"Reverse" curved laryngoscope



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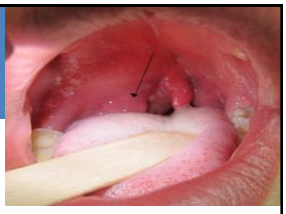
Peritonsillar Abscess



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- Pathogenesis –
  - ~~Streptococcal invasion of tonsil~~
  - Occlusion Weber glands
- Exam: odynophagia
  - Voice change
  - **trismus**

But what if you can't see the tonsils?

Lighted pelvic speculum

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Peritonsillar Abscess: Aspiration

- Cooperative patient – provide analgesia
- Topical analgesia
  - Cetacaine (Hurricane) spray
  - 1% Lidocaine + epi
- Prepare 18 gauge spinal needle
  - Cut guard providing **no more than 1 cm depth**

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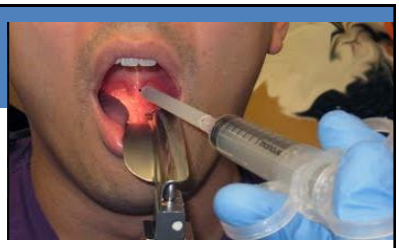
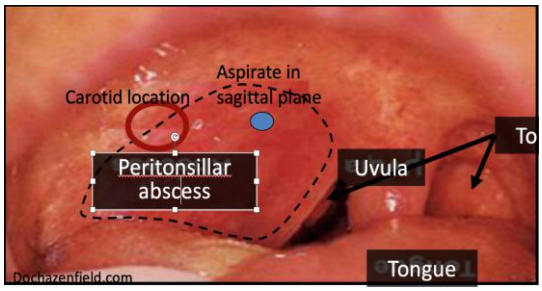
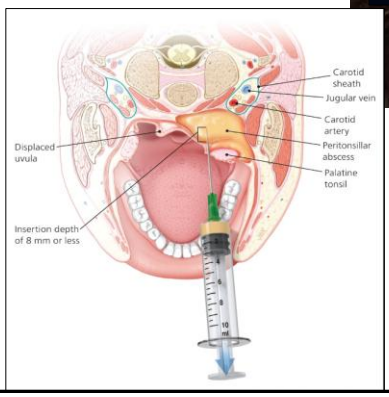
Peritonsillar Aspiration



- Have suction turned on
- Have Macintosh blade – retract tongue





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Peritonsillar Abscess: Does Everyone Need an Aspiration?

- 3 retrospective, observational trials
  - 297 pts: 97 medical managed, 200 surgical[1]
    - Average size: 1.3cm. vs. 2.6 cm
    - 5 (5%) failed medical-management
  - 307 pts: 211 medical vs. 96 surgical[2]
    - More surgical management with trismus
    - 17 (8%) failed medical-management
  - 214 pts: 87 medical vs. 127 surgical[3]
    - 8% treatment failure in BOTH groups
    - > 2cm size increased failure in both groups.

- Dexamethasone 10mg IV
- Ceftriaxone 2g IV
- Clindamycin 600mg IV

At discharge-
Clindamycin 300mg QID x 10 days

- **Bottom line: Small size < 1-2 cm (? lack of trismus) can be treated medically (with close follow up)**

[1]Souza DL, et al. Laryngoscope 2016 126: 1529-34
[2]Battaglia A, et al. Otolayrng Head Neck 2018; 158: 280-86
[3]Urban MJ, et al. Annal Otology, Rhinology, Laryngo 2022; 131: 211-18

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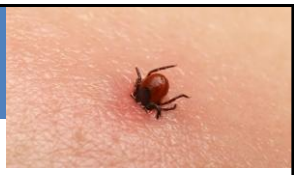
TICK TALK



1) Removal techniques

2) Lyme Prophylaxis

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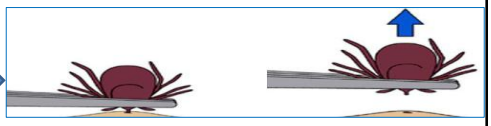
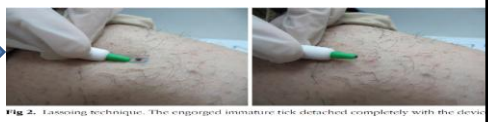
How Do You Remove a Tick? Comparison of Techniques

Belli, AA et al. J AM Acad Dermatol 2016; 75: 393-7.

Methods and Results: Non-randomized, cross-sectional study of 160 patients presenting to a Dermatology clinic with an attached tick, divided into one of 4 groups:

	Detached as whole	
- tweezer technique	33/40 (82.5%)	
- lassoing technique	19/40 (47.5%)	
- card detachment technique	3/40 (7.5%)	
- freezing technique	0/40 (0.0%)	

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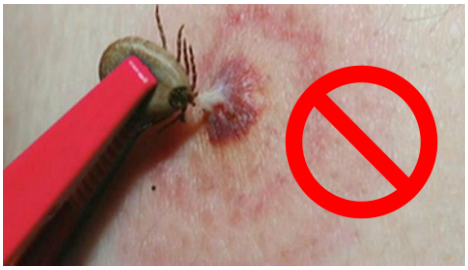
Removing an Attached Tick



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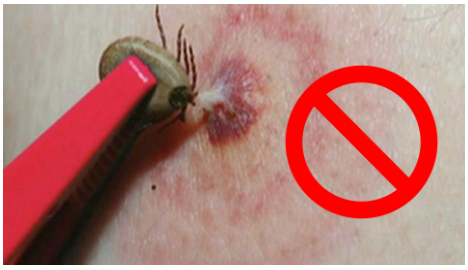
Removing an Attached Tick



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Dish Soap to Remove a Tick?

Report #1: 9 patients
Dish soap on cotton swap

Liquid soap to remove that tick?

The prevalence of Lyme disease in the United States has steadily increased over the past several years. In 2013, the disease was reported in all but 8 states.[1] Prevention, as we know, is key.

Common preventive steps include using DEET insect repellent, wearing long pants and sleeves outdoors, tucking pants into socks,

J Fam Pract 2015;64:73.

Report #2: 78 patients
Dish soap on dry paper towel
U Mass. Worcester MA

Dish soap for complete tick detachment

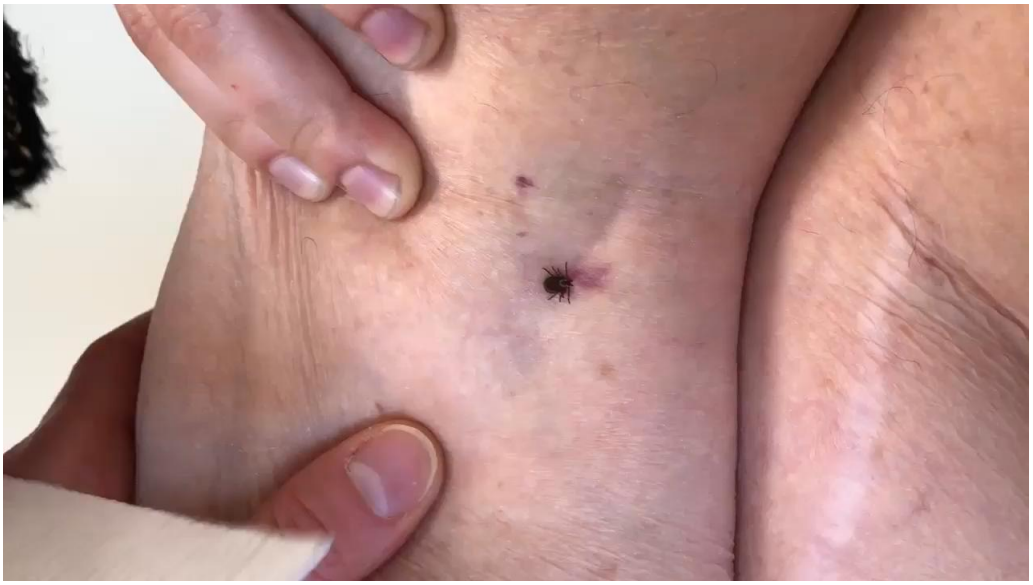
Elizabeth Tkachenko, BS,[a,b] Kaitlin Blankenship, MD,[b] Dori Goldberg, MD,[b] Mark J. Scharf, MD,[b] Shelly Weedon, PA-C,[b] and Nikki A. Levin, MD, PhD[b]
Worcester, Massachusetts

J Am Acad Dermatol 2021;84:e123.

https://ars.els-cdn.com/content/image/1-s2.0-S0190962219309740-mmc1.mp4

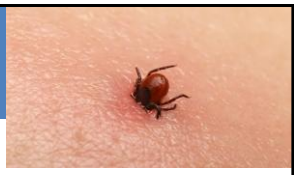
65

Dish Soap to Remove a Tick?



66

TICK TALK



1) Removal techniques

2) Lyme Prophylaxis

PROPHYLAXIS WITH SINGLE-DOSE DOXYCYCLINE FOR THE PREVENTION OF LYME DISEASE AFTER AN *IXODES SCAPULARIS* TICK BITE

ROBERT B. NADELMAN, M.D., JOHN NOWAKOWSKI, M.D., DURLAND FISH, PH.D., RICHARD C. FALCO, PH.D., KATHERINE FREEMAN, DR.P.H., DONNA MCKENNA, R.N., PETER WELCH, M.D., ROBERT MARCUS, M.D., MARIA E. AGÜERO-ROSENFELD, M.D., DAVID T. DENNIS, M.D., AND GARY P. WORMSER, M.D., FOR THE TICK BITE STUDY GROUP*

NEJM 2001

Methods: double-blind, randomized patients with deer tick, within 72 hrs

Results:	doxycycline 200mg x1 n = 235	placebo n=247
- Lyme disease within 6 weeks	1 (0.4%)	8 (3.2%)
- Nausea	30%	11%
- vomiting	5.6%	1.3%

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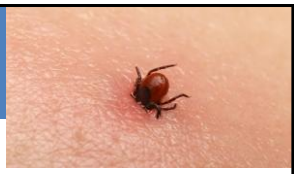
TICK TALK



1) Removal techniques

2) Lyme Prophylaxis – inclusion criteria per IDSA…

- The attached tick is a deer tick
- The tick is engorged or…
- The tick has been attached for >36 hours
- Treatment can be initiated within 72 hours of tick removal
- There is no contraindication to doxycycline

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Wound Care Pearls

- Repairing thin/fragile skin
- Topical anesthetic Pearls
- Cooling burns

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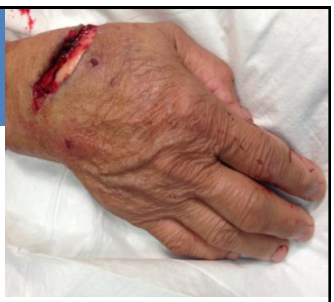
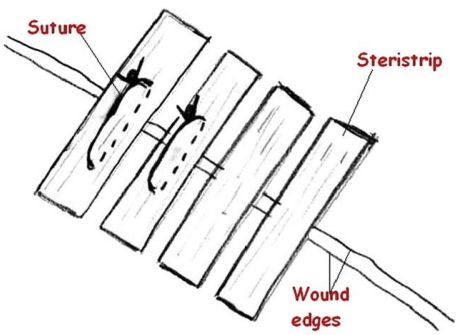
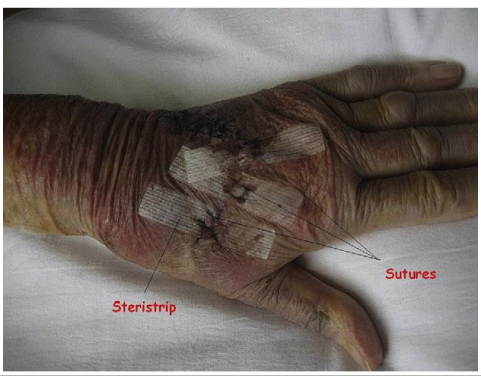
Wound Care Pearls



- Repairing thin/fragile skin

Think: “steri-strip, then suture”





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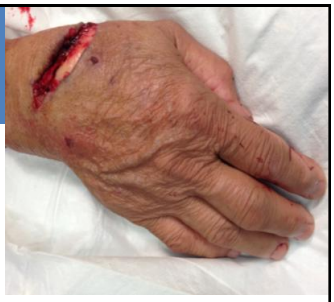
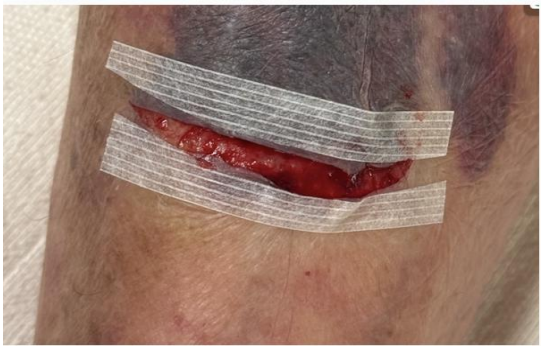
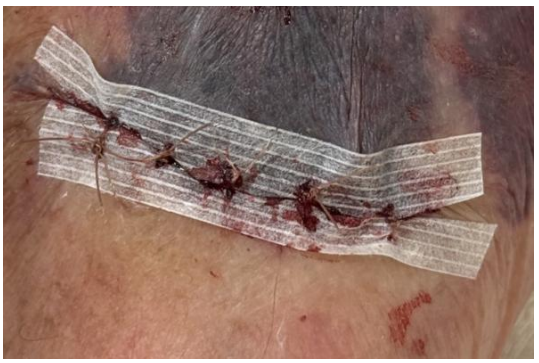
Wound Care Pearls



- Repairing thin/fragile skin

Think: "steri-strip, then suture"





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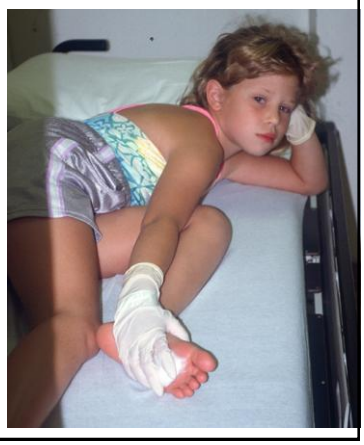
Topical Anesthetic Pearls

XAP (Xylocaine, Adrenaline, Pontocaine)
LET (Lidocaine, Epinephrine, Tetracaine)

#1: Must use a cotton ball

#2: HOLD in place 20 min (wearing gloves)

#3:Wound will blanche



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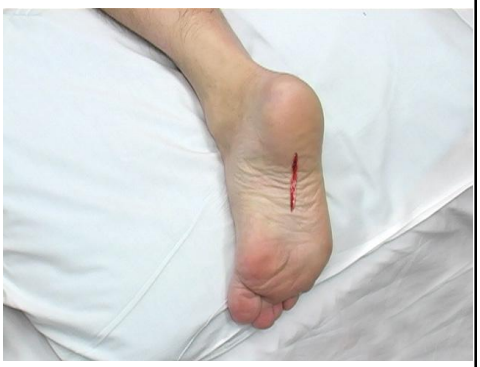
The Treaded Foot Laceration

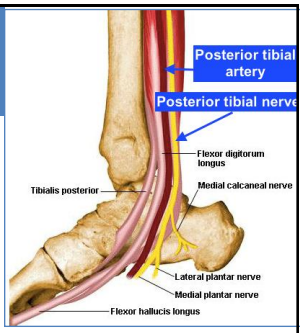
- They are usually deep
- They are usually dirty
- They are difficult to inject
  - Very sensitive/painful
  - Thick epidermis



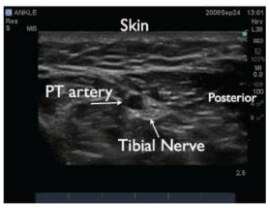
Answer: Tibial Nerve Block

73

Tibial Nerve Block

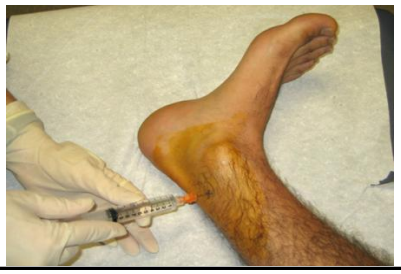


- **Tibial n. runs posterior to the posterior tibial artery**
  - On medial surface of ankle



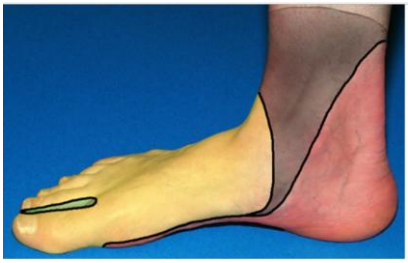
- **Can locate with Ultrasound**

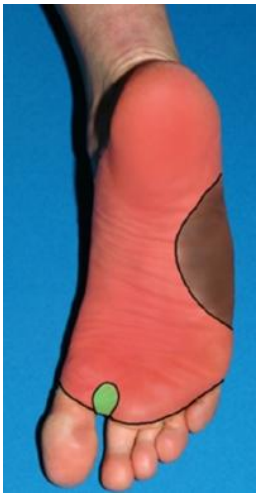
- **Inject proximal to medial malleolus and posterior to tibial artery**



74

Plantar Surface Anesthesia!





75

Wound Care Pearls

- Repairing thin/fragile skin
- Topical anesthetic Pearls
- Cooling burns

Ann Emerg Med 2020; 75:75-85

Cool Running Water First Aid Decreases Skin Grafting Requirements in Pediatric Burns: A Cohort Study of Two Thousand Four Hundred Ninety-five Children

Bronwyn R. Griffin, Grad Dip Emerg Nursing, PhD*; Cody C. Frear, BA*; Franz Babl, MD; Ed Oakley, MBBS; Roy M. Kimble, DMed(res), MBChB

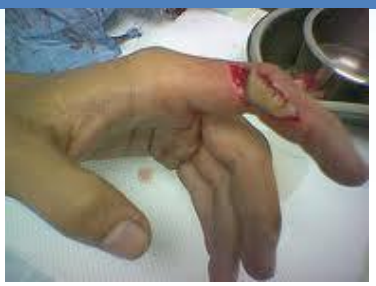
Cool running water for 20 consecutive minutes, within 3 hours of injury ➔ 40% decrease in skin grafting

	Adequate First Aid (n=1,780)			Inadequate First Aid (n=715)			Difference	
Outcome	n*	%	SD/IQR	n	%	SD/IQR	%	95% CI
Skin grafting	139	7.8	(0.6)	97	13.6	(1.3)	-5.8	(-4.5 to -7.0)
Full-thickness depth	47	2.7	(0.4)	53	7.6	(1.0)	-4.7	(-3.7 to -6.1)

76

Finger Procedures

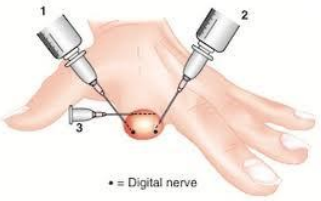
- Anesthesia: transthecal digital block
- Removing rings
- Hair tourniquet
- Subungual wood splinters
- Paronychia



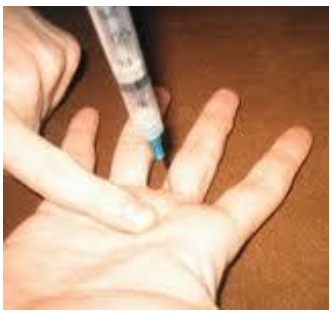
77

Transthecal Digital Block

- **Traditional digital blocks, performed correctly, are very effective in providing total anesthesia to fingers**
  - **But require multiple injection sites**



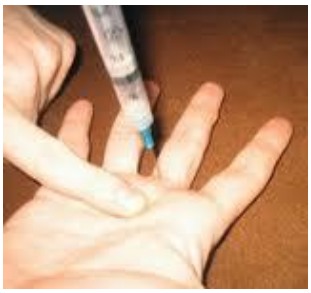
- **The transthecal block, if performed correctly, requires only a single injection site**



78

Transthecal Digital Block

- **Injection point = MCP and midline of the involved finger**
- **Apply pressure proximally to ensure distal migration of the anesthetic**



Borbon TY, et al. J Am Coll Emerg Physicians Open;2022 Jul 1;3(4):e12753.

79

Removing Rings

Step 1: perform digital/transthecal block

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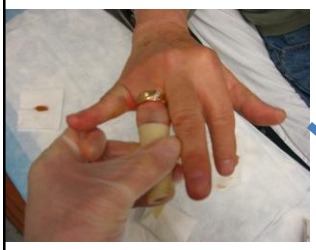
Removing Rings

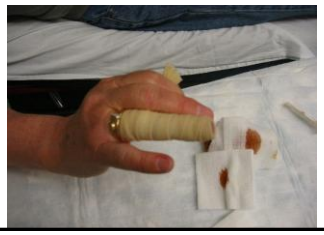
Step 1: perform digital/transthecal block

Step 2: Use Penrose or rubber tourniquet -

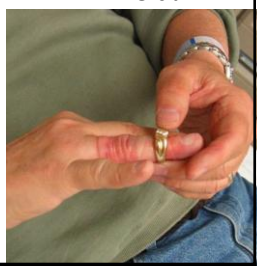
- apply distal to proximal



Wait 15-20 min



Viola!



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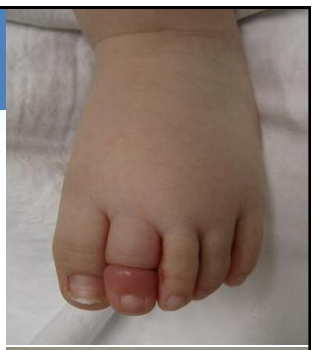
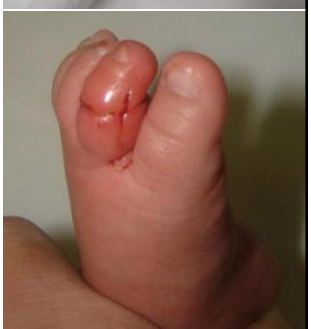
Hair Tourniquet

- **What is your "go to"?**





Images: Wikipedia

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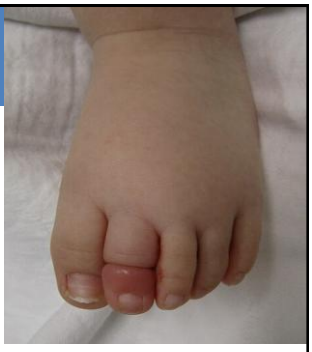
Hair Tourniquet



- **What is your "go to"?**

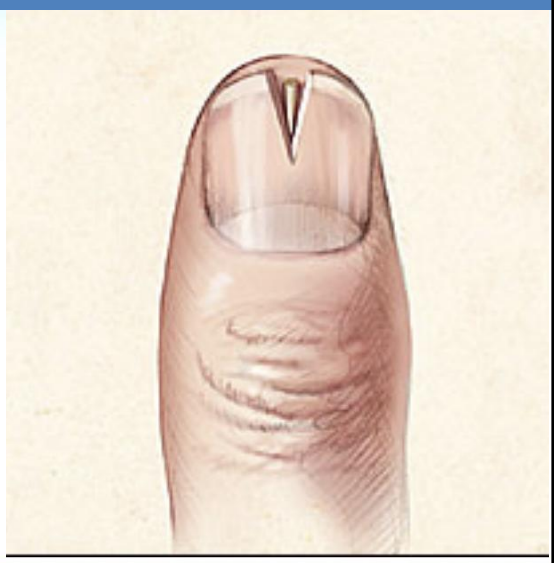
Answer: Depilatory agent

64% had resolution with
1-2 applications

83

Finger Procedures

- Anesthesia: transthecal digital block
- Removing rings
- Hair tourniquet
- Subungual wood splinters
- Paronychia



Chan C, et al. AFP 2003;67(12):2557-2562

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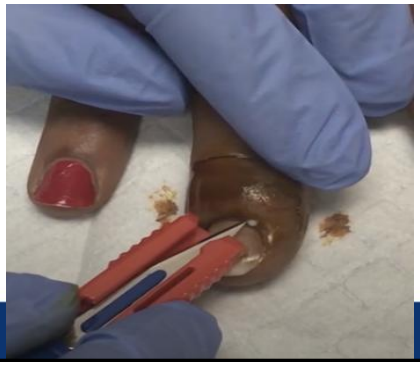
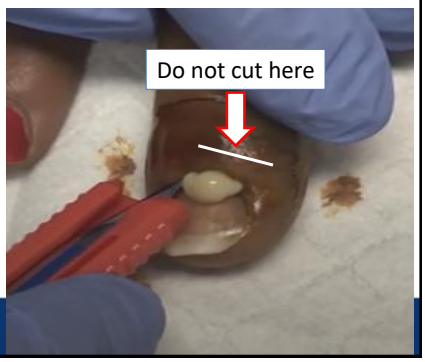
Finger Procedures

- Anesthesia: transthecal digital block
- Removing rings
- Subungual wood splinters
- Paronychia

Does not need MRSA coverage



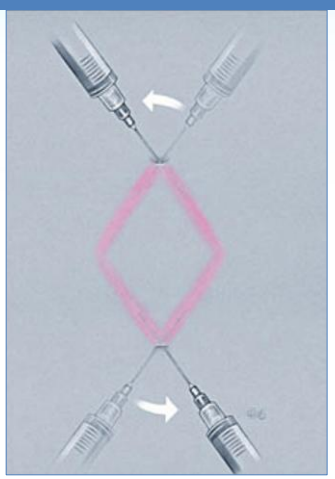


EMRAP 2017

85

Speaking of Abscesses....

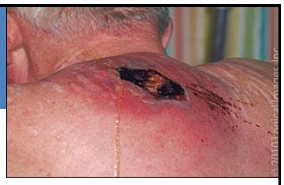
- **Anesthesia: field block**
  - lasts longer than that from local infiltration
  - does not cause swelling in the surgical field or obscure local anatomy
- No need to irrigate
- Packing or no packing
- Antibiotics



Salam GA. Am Fam Physician. 2004;69(3):585-590

86

Speaking of Abscesses....



- Anesthesia: field block
  - lasts longer than that from local infiltration
  - does not cause swelling in the surgical field or obscure local anatomy
- **No need to irrigate**
- Packing or no packing
- Antibiotics

Methods: prospective, nonblinded,187 ED pts, randomized:

Results: *30 day telephone f/u*	(+) irrigation.	(-) irrigation
Need for further intervention	15%	13%
Baseline differences		
- packing	89%	75%
- antibiotics	91%	73%

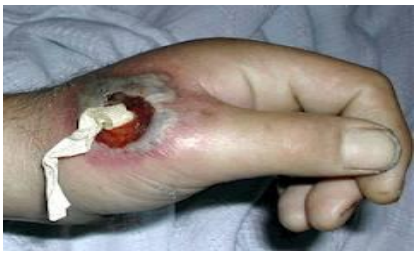
Chinook B and Hendey GW. Ann Emerg Med, March 2016

87

Speaking of Abscesses....

- Anesthesia: field block
  - lasts longer than that from local infiltration
  - does not cause swelling in the surgical field or obscure local anatomy
- No need to irrigate
- **Packing or no packing**
- Antibiotics

????????????



88

CA-MRSA Abscesses and I&D: Do You Need to Pack It?

3 studies say "No benefit"- but more pain with packing

[1]48 pts, single blind, randomized: packing vs. no packing
[2]57 pts, single-blind, randomized: packing vs. no packing
[3]85 pts, randomized : packing vs. no packing

← <5cm

Exclusions: DM/immunocompromised
Recurrent abscesses
Perianal/perineal

[1]O'Malley GF, et al. Acad Emerg Med; 2009
[2]Kessler, DO, et al. Ped Emerg Care; 2012
[3]Leinwand M, et al. J Pediatr Surg; 2013

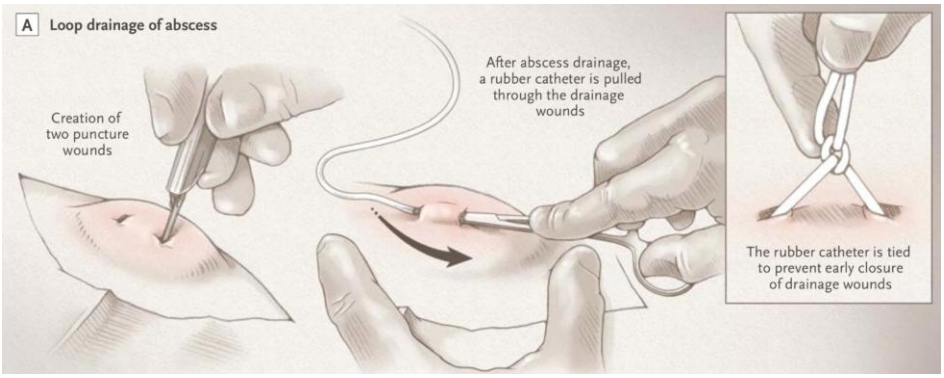
89

Do **Large Abscesses** Drain Better with "Loop Technique"?

90

Do Large Abscesses Drain Better with "Loop Technique"?

Answer: Yes



Singer AJ, et al. NEJM 2014; 370: 1039-47

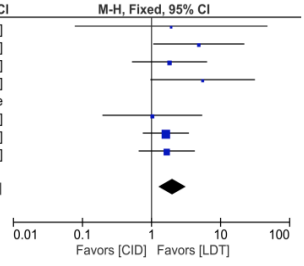
91

Do Large Abscesses Drain Better with "Loop Technique"?

Answer: Yes

Study or Subgroup	CID Events	CID Total	LDT Events	LDT Total	Weight	Odds Ratio M-H, Fixed, 95% CI
McNamara 2011	1	134	0	85	2.2%	1.92 [0.08, 47.71]
Ladde 2015	15	91	2	51	7.8%	4.84 [1.06, 22.08]
Ozturan 2017	9	23	6	23	13.3%	1.82 [0.52, 6.37]
Adamson 2018	10	20	2	13	4.4%	5.50 [0.96, 31.43]
Gaszynski 2018	0	17	0	36		Not estimable
Rencher 2019	3	40	3	41	10.0%	1.03 [0.19, 5.42]
Ladde 2020	19	97	13	99	37.6%	1.61 [0.75, 3.48]
Schechter-Perkins 2020	12	65	9	75	24.8%	1.66 [0.65, 4.24]
Total (95% CI)		**487**		**423**	**100.0%**	**2.02 [1.29, 3.18]**
Total events	69		35			

Heterogeneity: Chi² = 3.70, df = 6 (P = 0.72); I² = 0%
Test for overall effect: Z = 3.06 (P = 0.002)



Failure rate:

Conventional: 14.2%

Loop technique: 8.3%

NNT =18

Gottlieb M et al. Acad Emerg Med, published ahead of print, Oct. 9, 2020

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Speaking of Abscesses….

- Anesthesia: field block
  - lasts longer than that from local infiltration
  - does not cause swelling in the surgical field or obscure local anatomy
- No need to irrigate
- **Packing or no packing** →

??????????????

- Small…. No
- Large…. think… ***LOOP!***

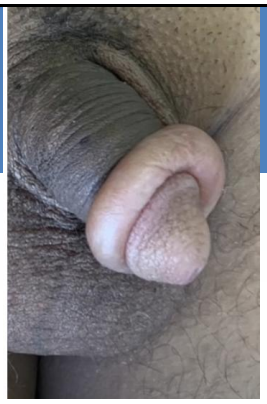
93

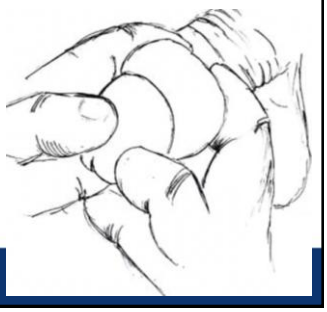
If Time Allows

Penile Problems….

94

Paraphimosis....
What If It Doesn't Retract?





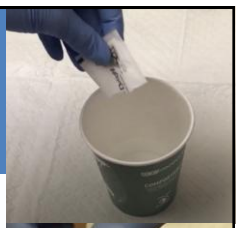
95

Paraphimosis....
What If It Doesn't Retract?

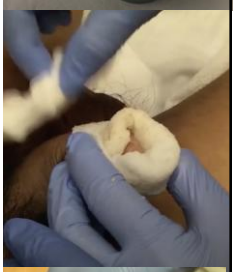
Pour a little sugar on it!

Apply granulated sugar, 60 min
- can also use mannitol solution on a gauze

Step 1



Step 2

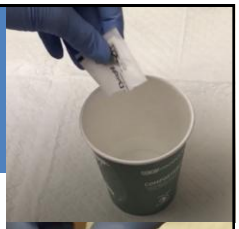


Step 3

96

Paraphimosis.... What If It Doesn't Retract?

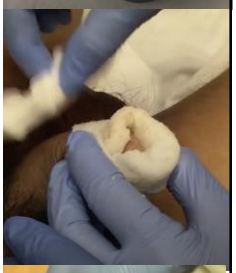
Step 1



Pour a little sugar on it!

Apply granulated sugar, 60 min
- can also use mannitol solution on a gauze

Step 2



What if that doesn't work?

Images courtesy of EMRAP

97

Paraphimosis.... What If It Doesn't Retract?

Pour a little sugar on it!

Step 1: apply lidocaine jelly in condom, 20-30min
Step 2: apply granulated sugar, 60 min
- can also use mannitol solution on a gauze

What if that doesn't work?

Inject 1 cc of hyaluronidase

DeVries CR, et al. Urology 1996; 48: 464-5

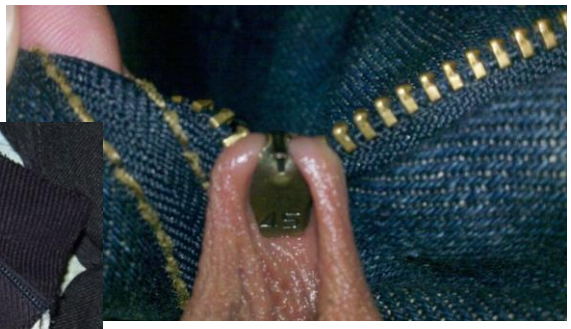
98

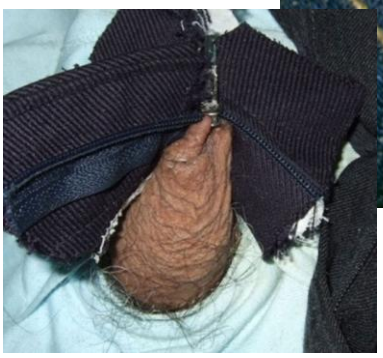
Foreskin/Scrotum Zipper Entrapment

99

Zipper Entrapment: Preparation

- **What's involved: Foreskin or Scrotum?**

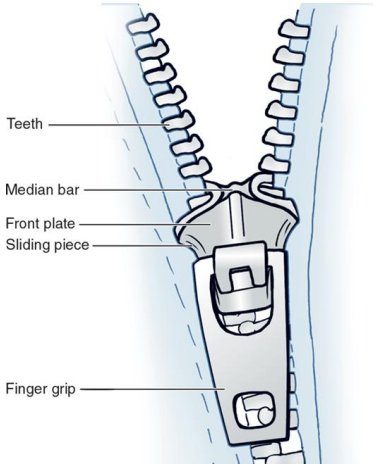




100

Zipper Entrapment: Preparation

- **What part of the zipper is involved: Teeth or Sliding Plate?**



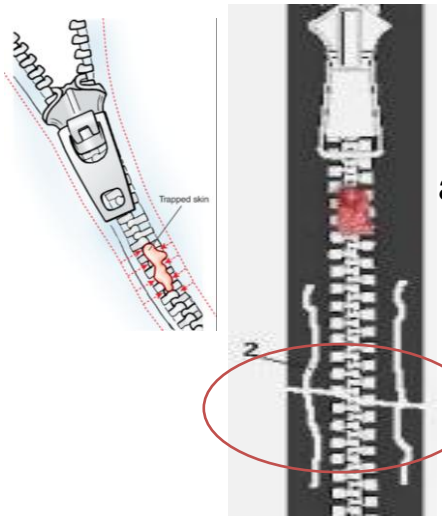
101

Zipper Entrapment: Preparation

- **Strongly consider procedural sedation in children**
  - **Ketamine an excellent choice**
- **Other analgesic options**
  - **IN fentanyl (1-1.5 mcg/kg)**
  - **Local injection of lidocaine or bupivacaine without epinephrine**

102

Zipper Teeth Entrapment



Cut across the teeth horizontally above or below the entrapped tissue

Gently pull teeth apart

103

Zipper Plate Entrapment

A

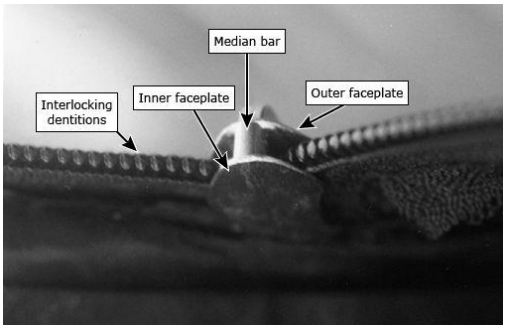
Reasonable Options:

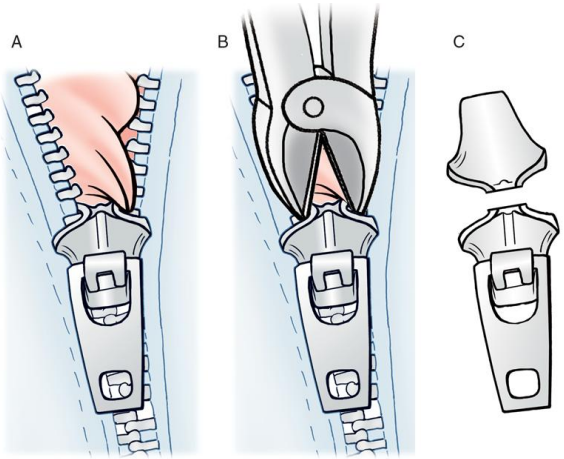
Cut the Median Bar

Separate the Anterior and Posterior Plates

104

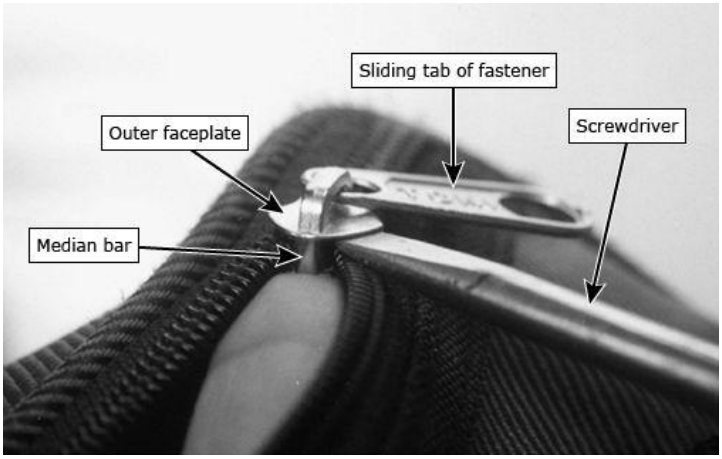
Cut the Median Bar





105

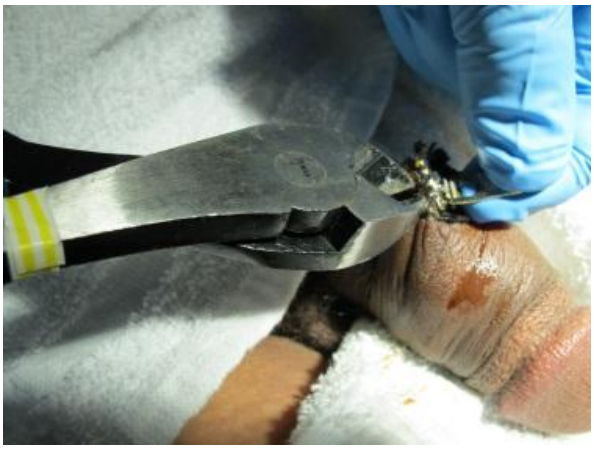
Separate the Anterior and Posterior Plates



Rotate the flathead screwdriver 90 degrees to separate the plates

106

Foreskin/Scrotum Zipper Entrapment



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My favorite Procedural Tips and Tricks

Thank You for Your Time and Attention!

?? Questions??

108

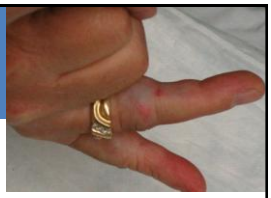
Supplemental Slides

109

Cutting Rings

110

Cutting Rings



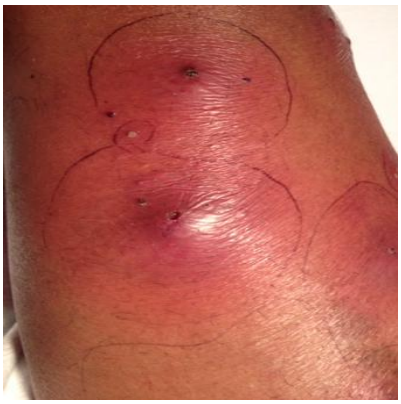
Leatherman Raptor

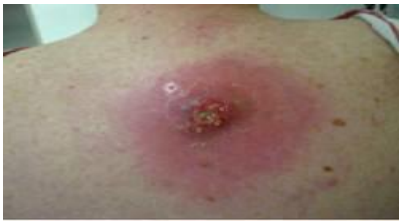
111

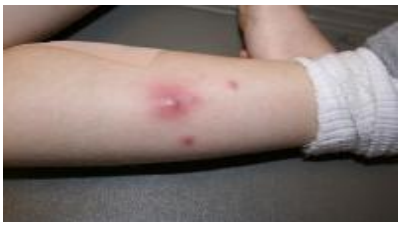
A Pet Peeve (and Pearl…)
Use the Term: CA-MRSA

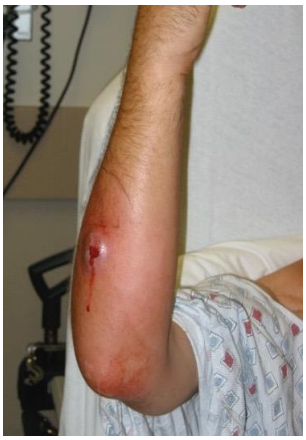
112

A Pet Peeve (And.. a Pearl)
Use the Term: "CA-MRSA"









"I think I got a spider bite"

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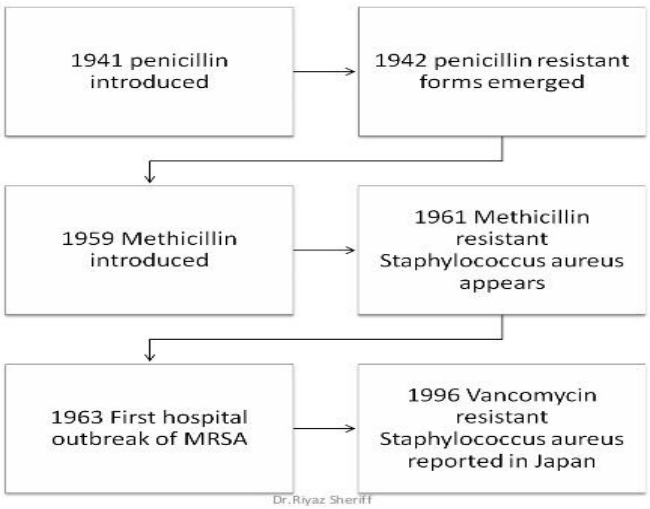
A History of Staph Aureus



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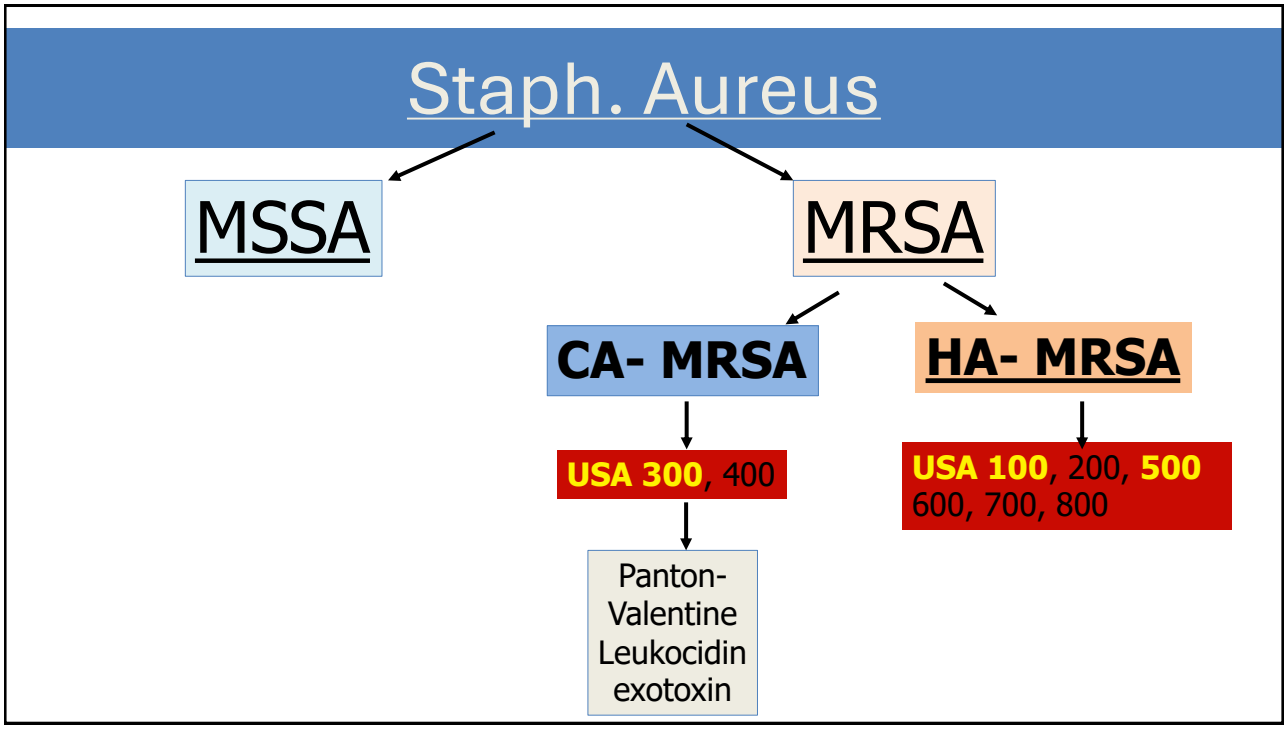
Staph. Aureus
MSSA
MRSA
CA- MRSA
HA- MRSA
USA 300, 400
USA 100, 200, 500
600, 700, 800
Panton-Valentine Leukocidin exotoxin

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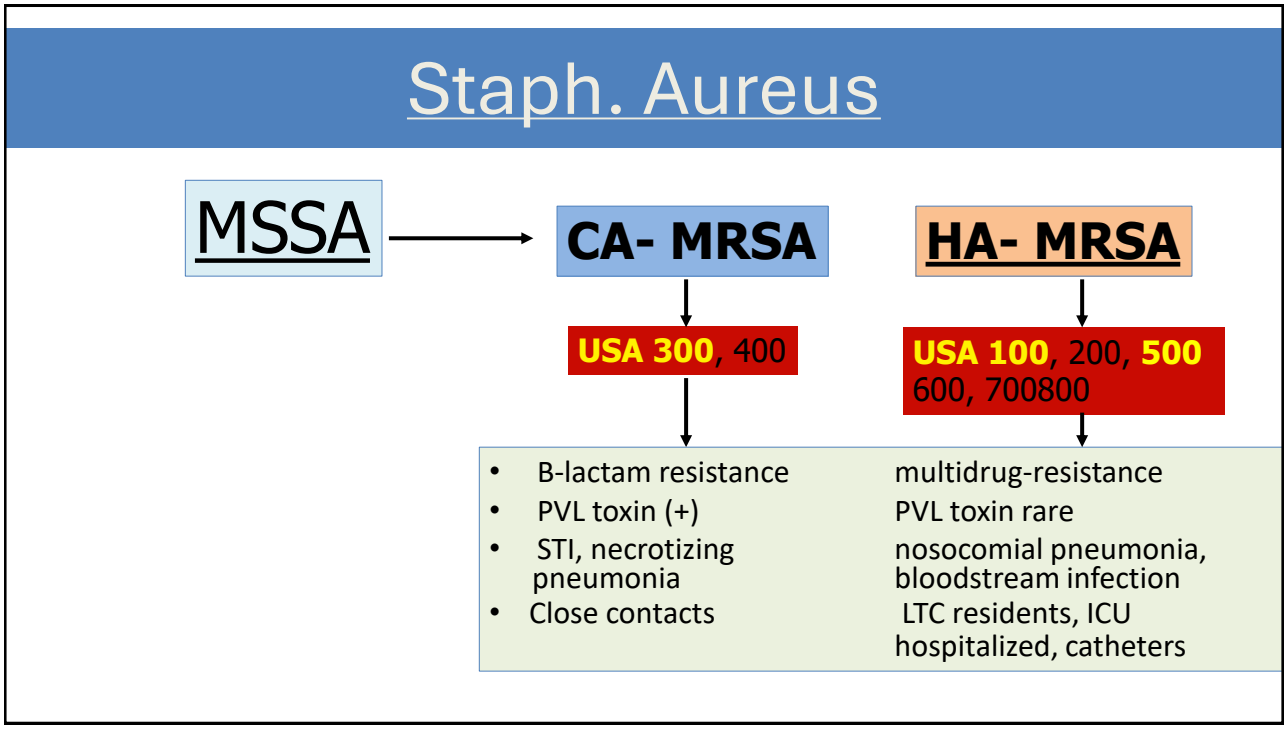
Staph. Aureus
MSSA
CA- MRSA
HA- MRSA
USA 300, 400
USA 100, 200, 500
600, 700800
• B-lactam resistance
• PVL toxin (+)
• STI, necrotizing pneumonia
• Close contacts
multidrug-resistance
PVL toxin rare
nosocomial pneumonia, bloodstream infection
LTC residents, ICU hospitalized, catheters

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Nomenclature of MRSA

US pulse field gel electrophoresis	Canadian MRSA	Multi locus sequence typing	SCCmec type	PVL presence
USA 100	2	5	II	NEGATIVE
USA 200	4	36	II	NEGATIVE
USA 300	10	8	IVa	POSITIVE
USA 400	7	1	IVa	POSITIVE
USA 500	5,9	8	IV	NEGATIVE
USA 600	1	45	II	NEGATIVE
USA 700		72	IVa	NEGATIVE
USA 800	2	5	IV	NEGATIVE
USA 1000		59	IV	POSITIVE
USA1100		30	IV	POSITIVE

Dr. Riyaz Sheriff 12

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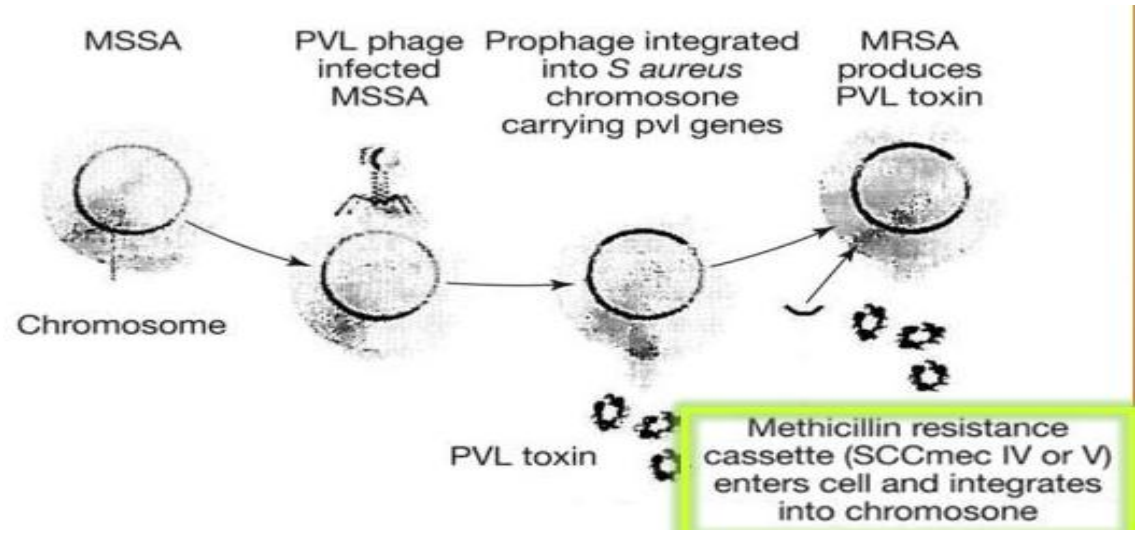
Where Did This Come From?



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The Role of Antibiotics After I&D – CA-MRSA

- 149 children[1]

	TMP-SMX x 10days	vs.	Placebo
– 1°: Cure rate @ 10-14 days	95.9%		94.7%
– 2°: New lesion(s) @ 10 days	12.9%		26.4%
– 2°: New lesion(s) @ 90 days	28.3%		28.8%

- 1267 adults[2]

	2 TMP-SMX x 7days	vs.	Placebo
– 1°: Cure rate @ 10-14 days	80.5%		73.6%
	(95% CI,2.1-11.7%, p=0.005, NNT = 14)		
– 2°: New lesion(s) @ 10 days	3.1%		10.3%

- 504 adults + 149 children[3]

	TMP-SMX 2 tabs x 10days	Clindamycin 300mg x 10days	Placebo x 10 days
1°: Cure rate @ 10 days	215/263 (81.7%)	221/266 (83.1%)	117/257 (68.9%)

[1]Doung, et al. Ann Emerg Med 2010 ,[2] Talan, et al. NEJM, March 3, 2016, [3]Daum RS, et al. NEJM 2017

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