

Tips and Tricks To Up Your Procedure Game

Lacy Feticc, MD

objectives

- Review, Discuss, & Improve
- Incision and Drainage Techniques
- Skin Biopsy
- Cerumen Impaction
- Trigger Point Injections
- Toenail wedge resection
- Circumcisions
- Competence with complications

Soapbox Moment & Street Cred



introduction

Procedures are often something you love or hate depending on how your past experiences have gone. Today we are going to discuss ways to improve your knowledge and confidence in performing some of the most common in-office procedures.

Adaptability is so important when performing procedures. You cannot do the same procedure the same way for every patient. Know your goals and the various techniques that can be used to achieve those goals.

I encourage you to speak up if you have a tip or trick! Please interrupt and share!



During ANY Procedure



- I clearly communicate every step PRIOR to the procedure.
- I play music – pt choice first
- Aroma therapy?
- Warmth?
- Using all senses...sight, taste, proprioception? VR? Think Soarin' California...what about mints, hard candy, scalp massage?

Soapbox #2 -RISKS & COMPLICATIONS

Complications occur. Sometimes complications are foreseeable and preventable and sometimes compounding factors present with undesirable consequences.

Procedural goals should include mindfully avoiding complications AND being competent in handling complications should they occur.



Common Risks:

- Bleeding
- Infection
- Allergic Rxn
- Damage to near-by structures
- Poor cosmetic outcome

BLEEDING

- Obvious risk anytime we break skin. Know and be familiar with what you have available to stop bleeding and/or what you want to have available.
- Know your patient! Are they taking plavix, warfarin, etc.? Do they have an underlying bleeding DO? Do they have liver or kidney dz? Do they pass out commonly?
- Be aware of the 4 Gs – Garlic, Ginger, Ginseng and Ginko. Inhibit platelet aggregation (1).
- As a preventative measure, use epi when you can.

What can you do once excess bleeding starts?

- Direct pressure – small, superficial bleed -be patient! 15 min minimum, consider using tourniquet on main arterial flow further upstream as well. Be mindful when you release pressure and gauze not to disrupt clot formation.
- Suture – figure of 8 is effective for large bleeding vessels >2mm (if you can't clearly see vessel to ligate) Vascular Ligation: Figure of eight suture - Bing video
- Electrocautery – dry field, be mindful of energy applied and nearby structures

Topical Hemostatic Agents

Name (generic)	Trade name	Manufacturer, location	Website	Approximate cost per use (\$)	Advantages	Disadvantages
Caustic agents						
Aluminum chloride 20-70%	Drysol Hypercare	Person and Cove Inc., Glendal, CA Stratus Pharmaceuticals, Miami, FL		\$10-\$20/bottle, few cents per use \$10/bottle, few cents per use	Inexpensive, less likely to cause pigmentation	Used only on superficial wounds
Ferric subsulfate 20%	Monseal's solution			\$0.20-0.60/ml	Inexpensive	Tattoo effect
Silver nitrate 10-50%				\$0.10-0.15/appliator stick	Inexpensive	Pigments skin causes thick eschar

- Click JB, Kaur RR, Siegel D. Achieving hemostasis in dermatology-Part II: Topical hemostatic agents. Indian Dermatol Online J. 2013 Jul;4(3):172-6. doi: 10.4103/2229-5178.115509. PMID: 23984226; PMCID: PMC3752468.

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Topical Hemostatic Agents - Noncaustic

Non-caustic agents						
Purine gelatins	Cellufam	Phzer, Memphis, TN	www.pfizer.com	\$11/gelatin square	Absorbs serum fills in weight non-antigenic, absorbable	Swelling can lead to damage of surrounding tissues
	Spongostan	Ethicon, Somerville, NJ	www.ethicon360.com	\$8 14-gelatin square		
	Surgiflam	Ethicon, Somerville, NJ	www.ethicon360.com	\$10/7.5 g applicator		
Micropones polyoxycarboxylates (MPPs)	Arista AH	Mediatrix, Nimrod, India	www.mediafoc.com	\$10/7.5 g applicator	Arista AH is a fine-pore liquid polyoxycarboxylate which contains no animal components	Expensive, Perist only available in Europe
	Perist	Cyflife, Scottsdale, AZ	www.perist.com	Perist not available in US	All are used in closed wounds and wounds that heal by secondary intention	
	Misare	Orthovita, Makem, PA	www.orthovita.com			
Hydrophilic polymers with polyanion salts (HPPs)	Wound Seal/Biostat/Pro QR	Bufile, Sarasota, FL	www.bufile.com	\$0.75/packet (800µm size)	Temporary, available over the counter	Only used in wounds that heal by secondary intention
Oxidized Cellulose	Surgicel	Ethicon, Somerville, NJ	www.ethicon360.com	\$3 for 3" square	Antibacterial, absorbable	Granulomatous foreign body reaction, acidic pH may inactivate enzymes
	Chexcel	Beckman Dickinson, Franklin Lakes, NJ	www.ethicon.co.uk	\$25-80/5.5x8 cm pad		
Microfibrillar Collagen	Avicel	Davol, Cranston, RI	www.davol.com	\$1.05-\$1.60/1 oz powder	No significant activity, absorbable	Cannot be used as a surface barrier or for packing wounds, Colicoid/Colace
	Avicel	Ethicon, Somerville, NJ	www.ethicon360.com	\$80-\$180/sponge		
	Hebitol, Hebitone	Integral Performance, Paramus, NJ	www.integralpc.com	\$150/1 g powder		
Hemostatic dressings						
Alginate					Wound protective, hemostatic, hemostatic	Not effective for high pressure bleeding foreign body reactions
Mineral powder	Quikclot	Z-medica, Wallingford, CT	www.quikclot.com	\$7.4/packet		
Chitosan	Celox	SAW Medical, Wilmington, DE	www.celox-medical.com	\$55-63/4x2" square	Antibacterial	
	ChitoFlex, HemCon	HemCon Medical Technologies, Houston, TX	www.hemcon.com			

- Not listed:
 - Epinephrine
 - TXA
 - Cyanoacrylate
AKA Dermabond

Must have access/be able to apply a multitude of approaches/agents.

CA = California, FL = Florida, TN = Tennessee, NJ = New Jersey, NY = New York, VA = Virginia, IL = Illinois, IN = Indiana, OH = Ohio, PA = Pennsylvania, RI = Rhode Island, CT = Connecticut, DE = Delaware

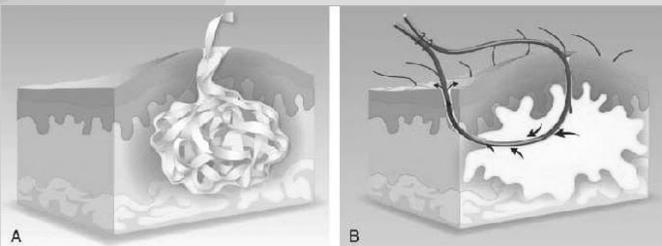
“To a man with only a hammer, a screw is a defective nail.”
-Abraham Maslow



Let's Get Into the Details... Incision and Drainage

Query:
How many would incise, drain and pack this?

How many would use a loop incision and drainage technique?



LOOP INCISION AND DRAINAGE

https://videos.files.wordpress.com/Z48KANth/loop-i-d-web-version_hd.mp4
The existing literature suggests that LDT is associated with a lower failure rate than CID. However, the data is limited by small sample sizes and predominantly retrospective study designs. Given the potential for less pain, decreased scarring, and lower associated healthcare costs, this technique should be considered for the treatment of skin and soft tissue abscesses in the ED setting, but further studies are needed (6).

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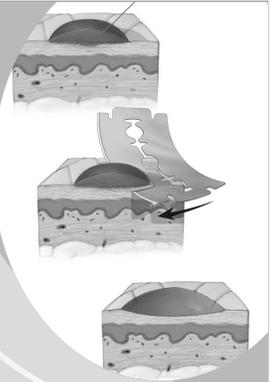
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Skin Biopsy

- Several techniques exist:
 - Shave
 - Saucerization
 - Snip
 - Punch
 - Curettage
 - Incisional
 - Excisional

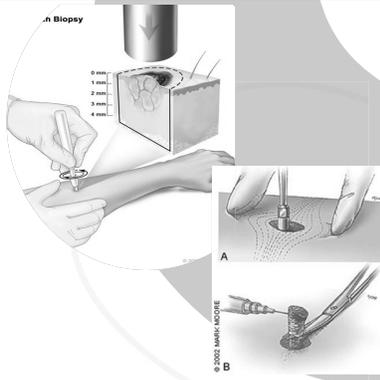
SHAVE BIOPSY

- Things to keep in mind:
- Use anesthetic to mound up or protrude lesion
 - Pinch, pull, and stretch to manipulate skin to accommodate your blade.
 - Pinch, bend, rotate blade to accommodate to your lesion.
 - If no dermablade/straight blade is available and needing saucerization – consider using a punch to "scrape" the skin.



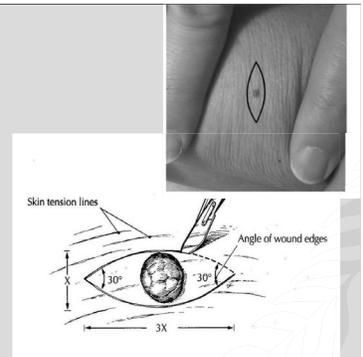
Tips & Tricks With Punch Biopsy:

- *Keep in mind ALL punch devices are 4mm in DEPTH.
- *We are often taught and teach to bury the device to the hub. **BE CAREFUL with this approach, esp on the hands and feet as you may damage nerves and blood vessels in these thin-skinned areas. Be more mindful of the giving way of resistance or the subtle pop as you pass through the dermis.
- *Use a needle to extract your core and have scissors ready to cut at the base which should have a "fatty" appearance.
- *Stretch the skin perpendicular to the tension lines!



Excisional Biopsy

- Reminder: Goals beyond lesion removal are cosmetic outcomes, proper wound healing, hemostasis, etc.
- Pre-procedure mapping is key.
 - Identify skin tension lines!
- Once you have placed the blade at apex perpendicular to the skin, angle the blade away from the lesion to evert the edge.
- Placing deep-buried absorbable suture is almost always a must!

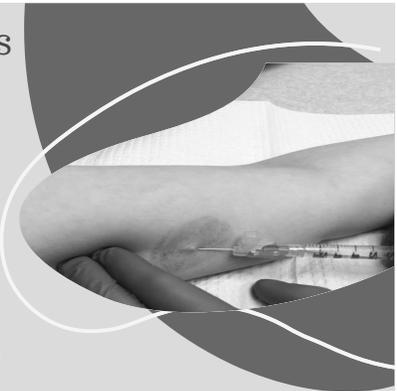


- "Let no one ever come to you without leaving better and happier." -Mother Teresa



Nexplanon pointers

- Numb both distal and proximal ends if arm is difficult to access – device is 1.6 inches in length
- Create counter tension prior to inserting device needle tip
- Use a compression dressing after placement! Have the patient keep it in place for 24 hrs. I like Coban but remember latex allergy and consider soft base layer. Ace bandage is good too.
- When removing Nexplanon, place pressure with ND hand on prox end and inject UNDER the distal end of the device. Try to keep ND hand in place and if possible, place ND thumb under the device as you make incision
- Incision should be parallel/adjacent to Nexplanon, using previous insertion site if possible. Keep scalpel handy as you may need to scrape away scar tissue on rod. Grasp rod with stats or Adson pickups.



Cerumen Removal

LIGHTED CURETTE IS WHERE IT IS AT!

Grasp the helix of the ear and rest hand on head as you pull upward

- Use irrigation prior if complete occlusion is present. Consider using:
 - Debrox
 - Hydrogen Peroxide
 - Liquid Colace



Onychocryptosis-wedge resection

- Consider having patients soak foot prior to procedure.
- Seriously - don't use the HUGE Nail SPLITTERS if you can avoid it!
- Recently I have been using an open straight stat or small lifter and razor blade to cut nail.
- Grasp/stabilize the nail you are leaving behind as you clip/cut wedge section.
- Be sure to explore the nail fold/bed for any remaining nail remnants or you could see this return...



"I'VE LEARNED THAT PEOPLE WILL FORGET WHAT YOU SAID. PEOPLE WILL FORGET WHAT YOU DID. BUT PEOPLE WILL NEVER FORGET HOW YOU MADE THEM FEEL."
-MAYA ANGELOU



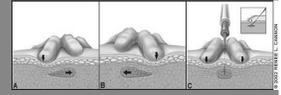
Trigger Point Injections

TRIGGER POINT VERIFICATION

- o Jump sign – patients are started by intense pain with mild-mod pressure
- o Local twitch – visible or palpable contraction of the muscle and/or skin when pressure is applied
- o Referred pain – pain perceived at a location other than the site of painful stimulus

TPI

- o Small gauge needle 25-30 length depends on TP location
- o I don't always inject (dry needling)
 - Pepper the palpable bundle with needle tip – causes mechanical disruption and inactivation of TP



Circumcision with Gomco

Common complications include:

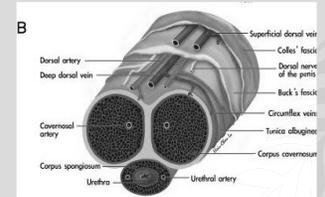
- Hematoma
- Bleeding
- Poor cosmetic outcome

The overall rate of complications with routine newborn circumcision is extremely low at 0.2–0.34% (11).



Tips and Tricks...

- Assistant at head using gloved finger as a pacifier with ABCs in mind
- Inject at 10 and 2o' clock
- Only use stats to break adhesions if they are there, I like to visualize when possible.
- Central crush is personalized
- If you identify incomplete foreskin prior to starting the procedure, be on your toes for a hypospadias. ALSO, the safety pin method will serve you well here.



Tips and Tricks...dreaded bleeding

Prevention -

- Do not place bell directly on glans and then bring skin around
- Do not place arm/yoke and then tug up apex
- Talk about the weather once device is secure

Once it hits the fan...

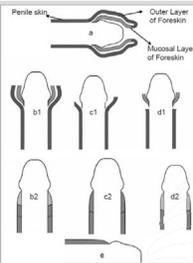
AVOID use of electrocautery and silver nitrate!
First – find the bleed! Apply pressure with petroleum gauze wrap and apply manual pressure – 10-20 min!

**IF the bleed is coming from the crushed/cut area (not the frenulum) you can consider recrusching - <2mm

Second – time to pull out the topical hemostatic agents – Surgical, Gelfoam, topical epi, sealant

Combine with pressure with bandaging/coban - don't use red
Be mindful of the urethra!

Last resort is throwing a stitch – stay away from the ventral surface!



summary

Avoiding risks and being fully capable of addressing those potential risks should be included in your procedural goals.

Jump at any opportunity to learn a "new way" of doing things!

Be familiar with ALL your resources.

Making your patients comfortable during a procedure contributes to your comfort as well.



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thank you

Lacy Fettic, MD
fettic@hghospital.org