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DERMATOLOGY  
and SKIN CANCER CENTER, PA



Fellow  
American Academy of Dermatology



American College  
of Mohs Surgery  
Fellowship trained skin cancer  
and reconstructive surgeons



# Surgical Pearls for Happier Patients

Dr. Kevin Brough





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Disclosures: None





## Objectives:

- #1 Understand how to provide local anesthesia with minimal patient discomfort
- #2 Learn easily applied practices to make surgical wounds look better immediately
- #3 Determine when referral to another provider would be appropriate



# Local Anesthesia



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# Minimizing the Pain of Local Anesthesia Injection

A. Robert Strazar, M.D.,  
Peter G. Leynes, B.Sc.,  
M.Sc.B.M.C.  
Donald H. Lalonde, M.D.

Hamilton and Toronto, Ontario; and  
Saint John, New Brunswick, Canada



**Background:** Local anesthetic injection is often cited in literature as the most painful part of minor procedures. It is also very possible for all doctors to get better at giving local anesthesia with less pain for patients. The purpose of this article is to illustrate and simplify how to inject local anesthesia in an almost pain-free manner.

**Methods:** The information was obtained from reviewing the best evidence, from an extensive review of the literature (from 1950 to August of 2012) and from the experience gained by asking over 500 patients to score injectors by reporting the number of times they felt pain during the injection process.

**Results:** The results are summarized in a logical stepwise pattern mimicking the procedural steps of an anesthetic injection—beginning with solution selection and preparation, followed by equipment choices, patient education, topical site preparation, and finally procedural techniques.

**Conclusions:** There are now excellent techniques for minimizing anesthetic injection pain, with supporting evidence varying from anecdotal to systematic reviews. Medical students and residents can easily learn techniques that reliably limit the pain of local anesthetic injection to the minimal discomfort of only the first fine needlestick. By combining many of these conclusions and techniques offered in the literature, tumescent local anesthetic can be administered to a substantial area such as a hand and forearm for tendon transfers or a face for rhytidectomy, with the patient feeling just the initial poke. (*Plast. Reconstr. Surg.* 132: 675, 2013.)



# Local Anesthesia – 3 parts



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1. Prep

2. Poke

3. Burn



# Part 1: Prep



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## Part 1: Prep

Avoid "scary" words

- No "Stick and Burn"
- "You are going to feel a little poke"

Instead:

"We are going to give you the medicine now."

"Ready, 1,2,3"

Or just talk about something else





## Part 2: The Poke



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**Use a SMALL  
needle  
(27-30g)**



# Part 2: The Poke

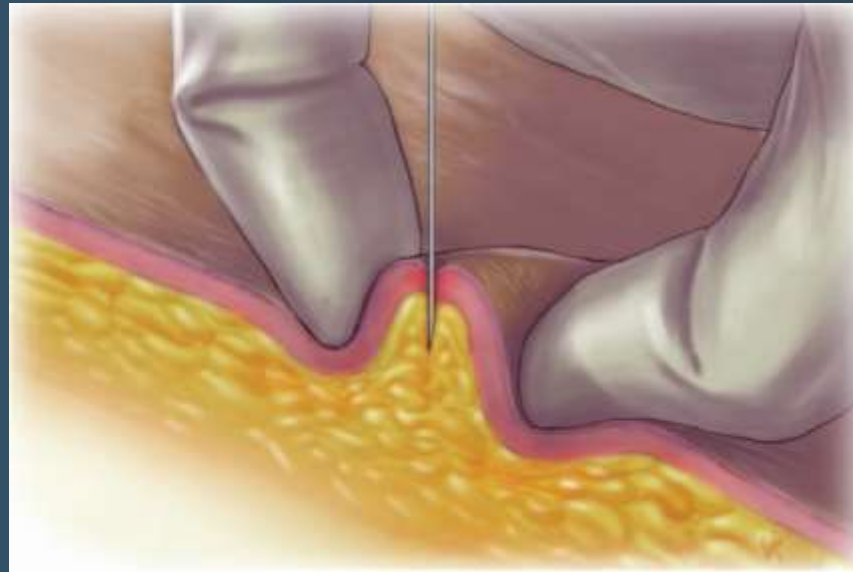


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## Use Distraction

- Pinch
- Vibration
- Stretching
- Touch
- Pressure

Could use Topical  
anesthetic 1st  
EMLA (2.5% lidocaine and  
2.5% prilocaine)



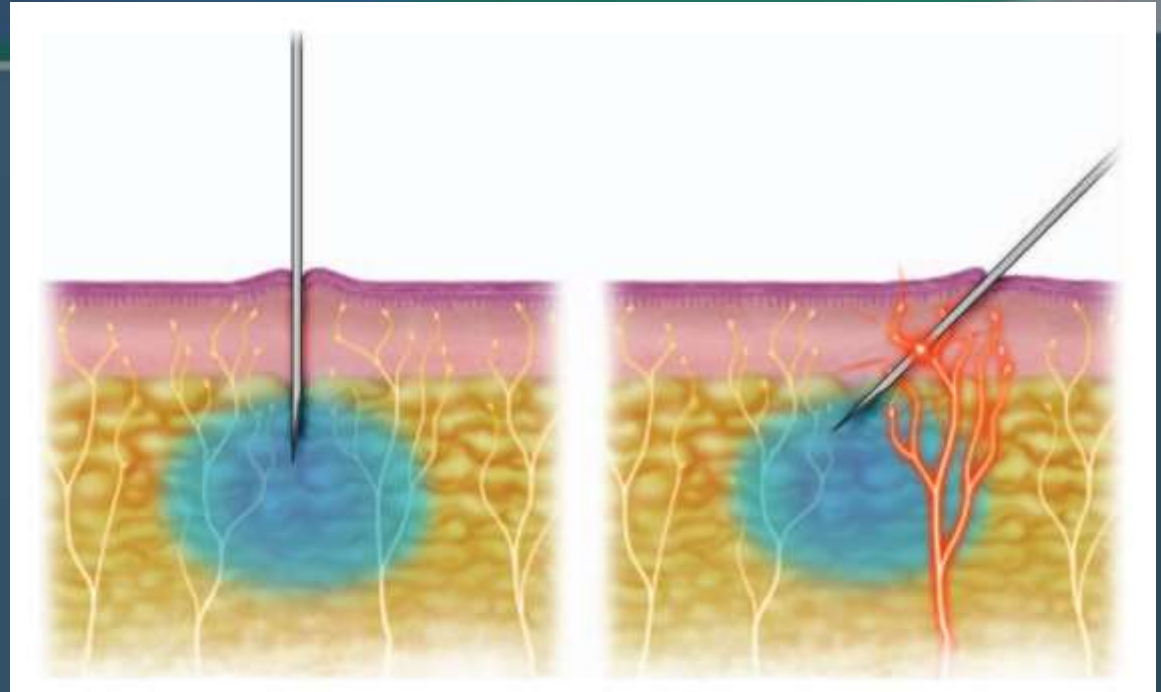
Strazar et. Al., Minimizing the Pain of Local Anesthesia  
Injection, *Plast. Reconstr. Surg.* 132:675, 2013



# Part 2: The Poke



- Vertical Insertion of the needle
- Stabilize the needle



Strazar et. Al., Minimizing the Pain of Local Anesthesia Injection, *Plast. Reconstr. Surg.* 132:675, 2013

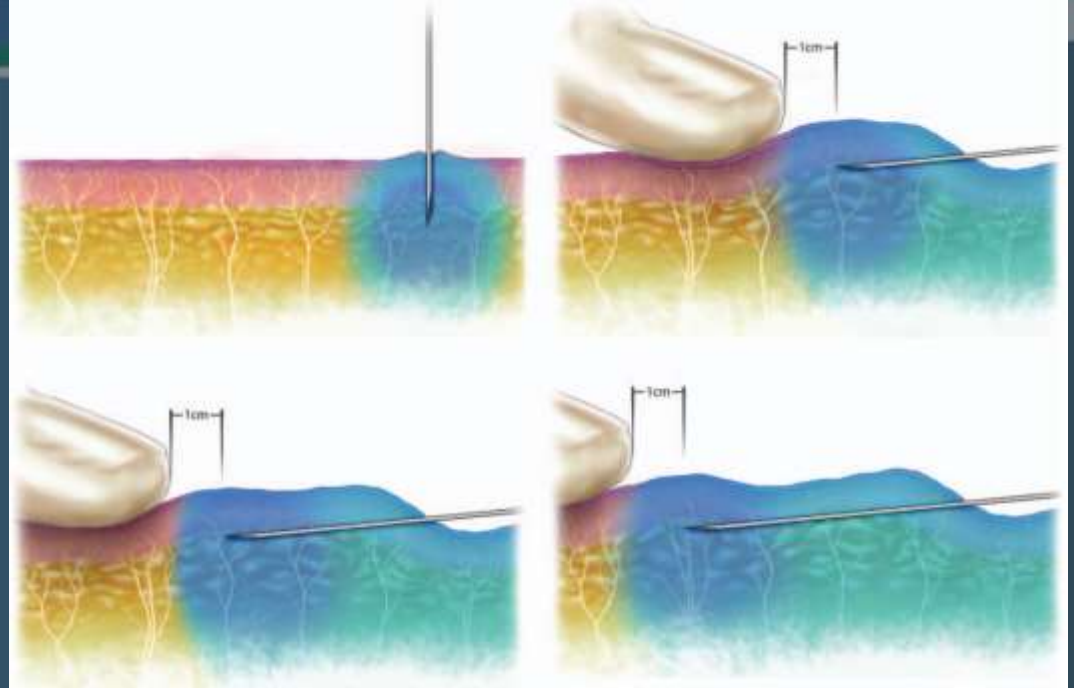


# Part 2: The Poke



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More pokes go  
where it is already  
numb!



Strazar et. Al., Minimizing the Pain of Local Anesthesia  
Injection, *Plast. Reconstr. Surg.* 132:675, 2013

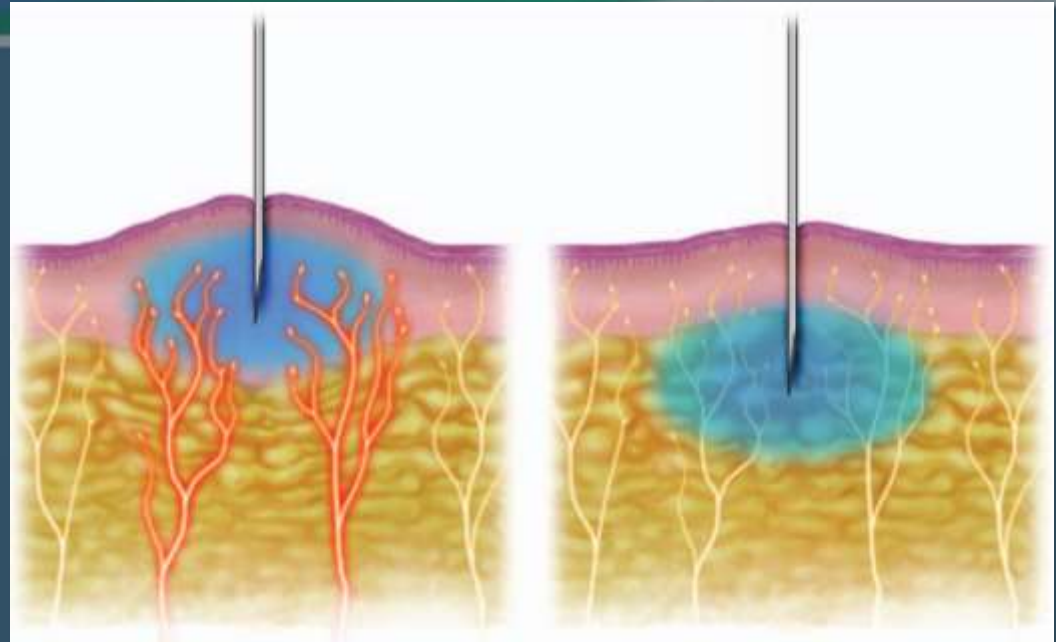


# Part 3: The Burn



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- Inject SLOWLY
- Start with subdermal bleb and PAUSE
- Then inject more with needle tip 1 cm behind wheal



Strazar et. Al., Minimizing the Pain of Local Anesthesia Injection, *Plast. Reconstr. Surg.* 132:675, 2013



# Part 3: The Burn



- **Buffer Lidocaine**
- **Lidocaine has pH of 4.2**
- **1:9 ratio of 8.4% sodium bicarb raises to ~7.4**
- **Some papers have suggested as high as 1:3 ratio**
- **Warm the lidocaine (less pain and faster onset)**

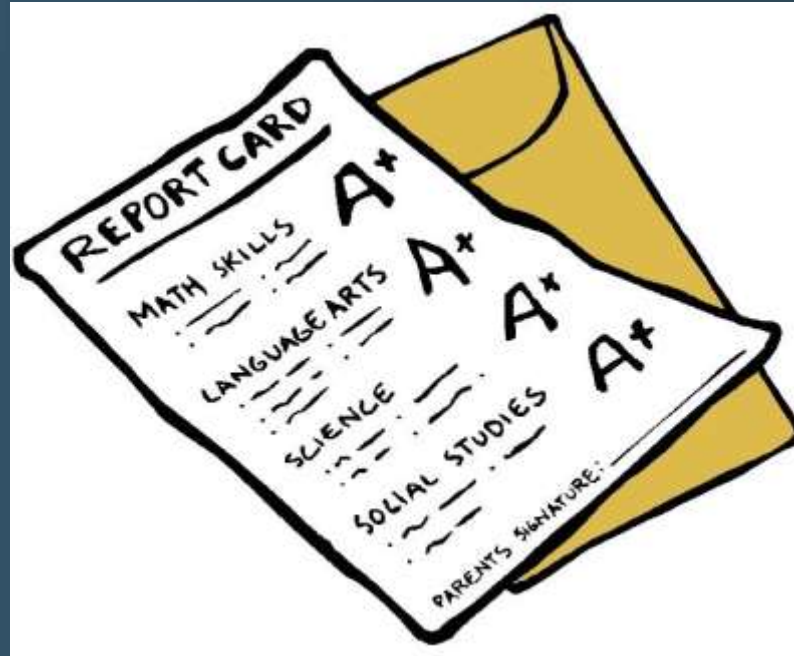


# Local Anesthesia



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Get feedback



Lets make things Look GOOD



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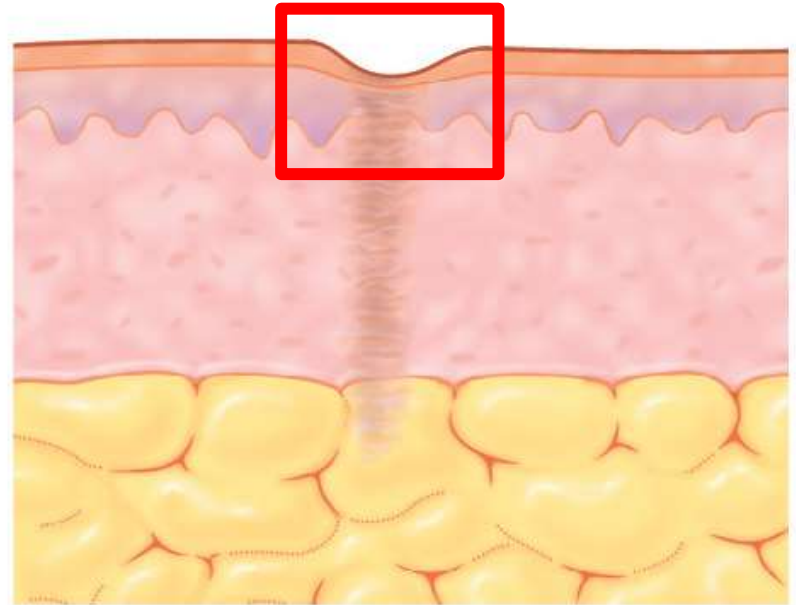
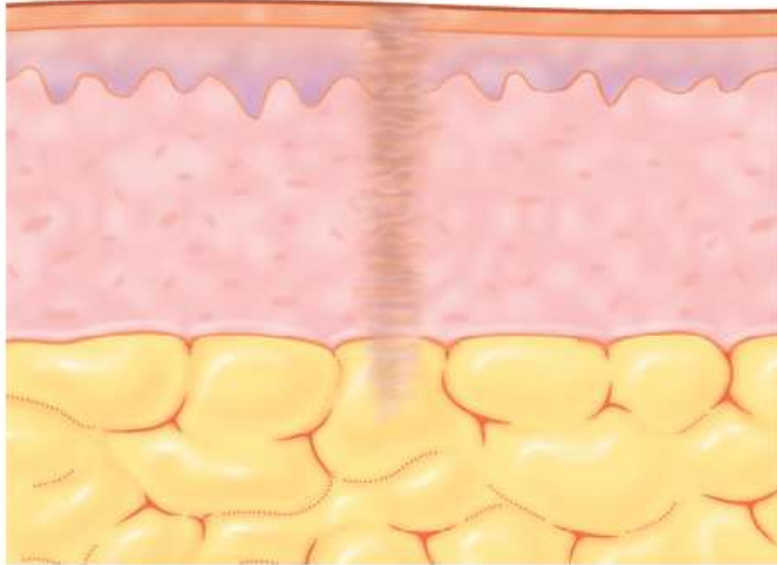




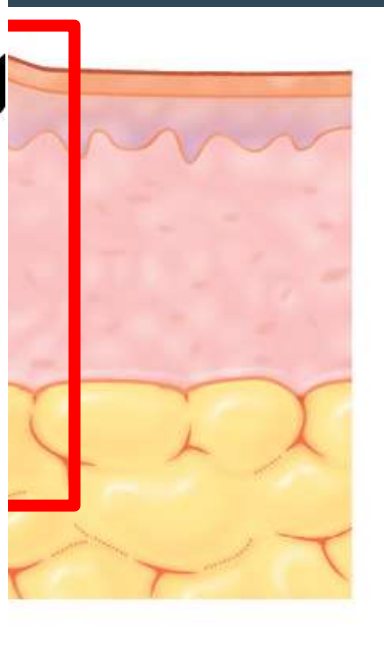
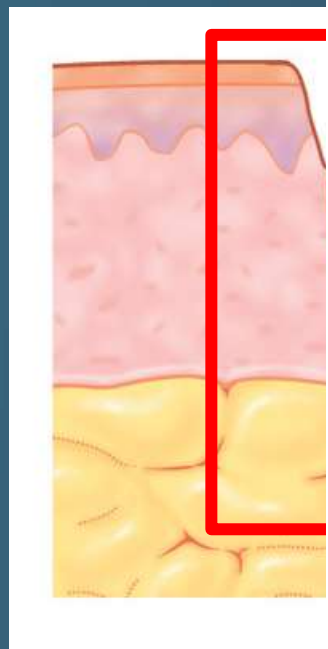
Tension and Eversion are **CRITICAL**



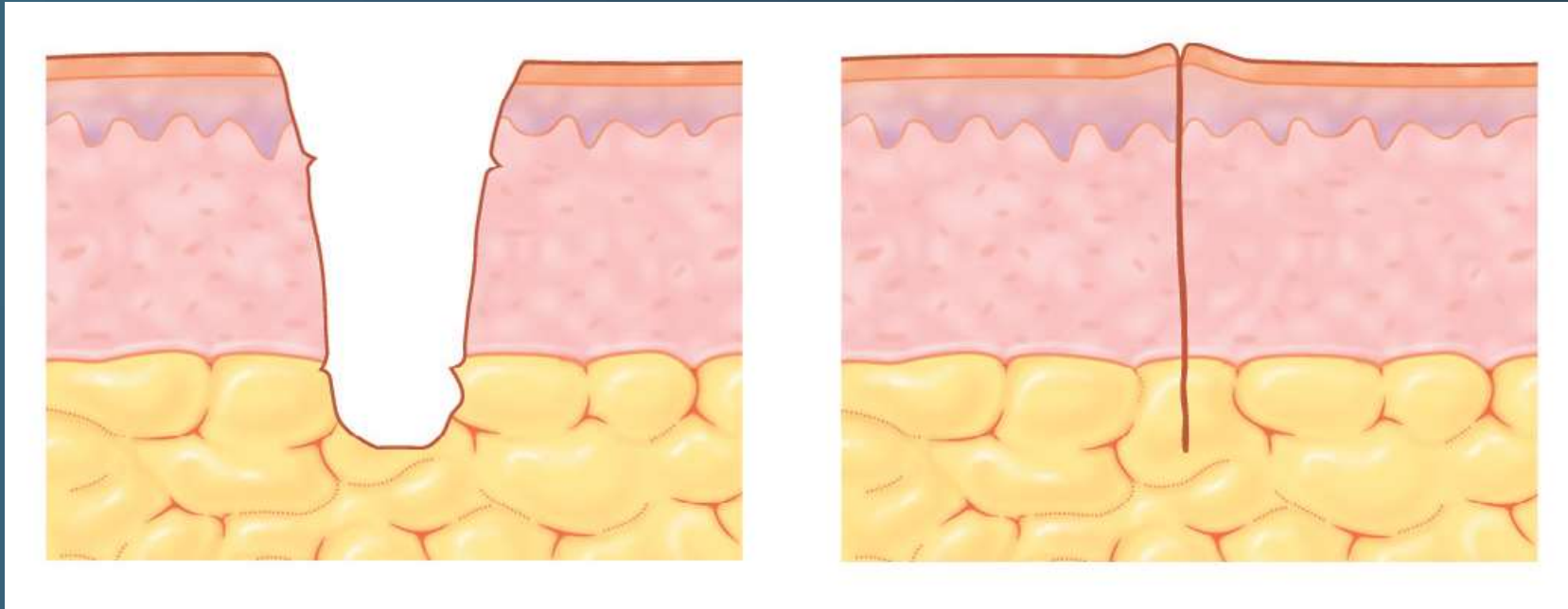
# Scar Spreading



Cut straight up and down



# Cut straight up and down



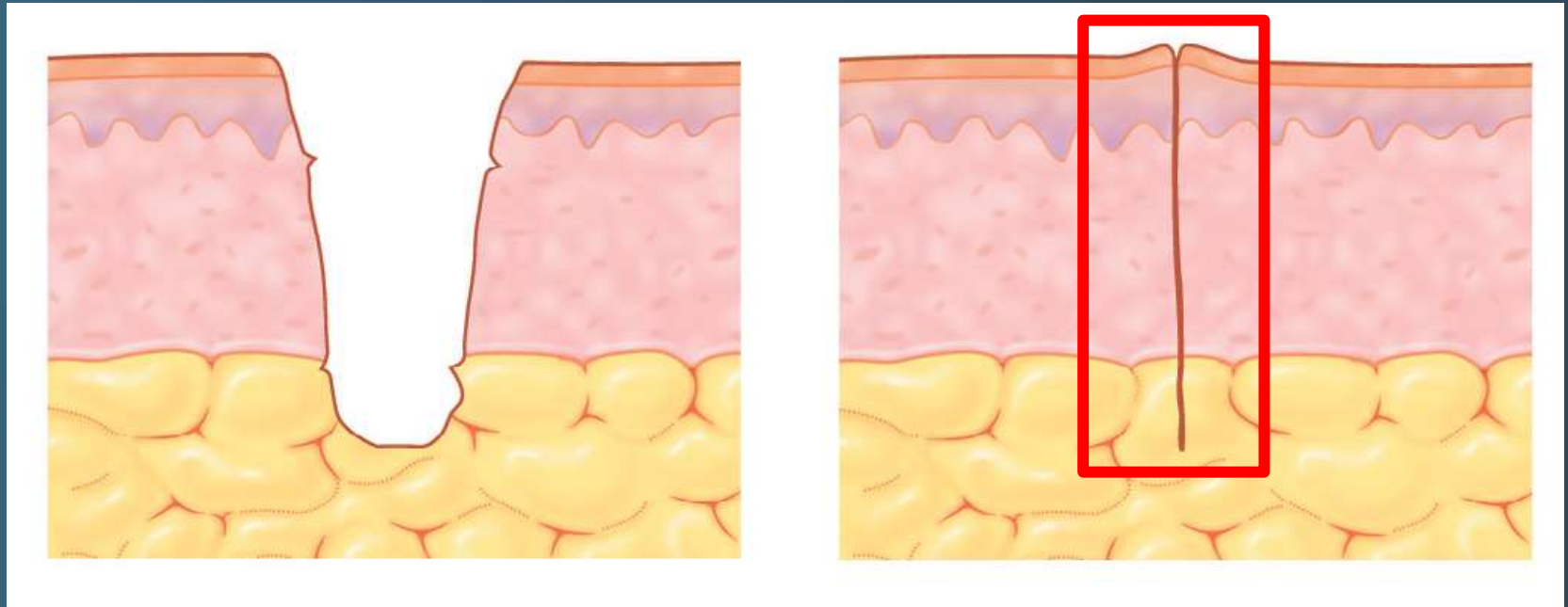
# Undermining



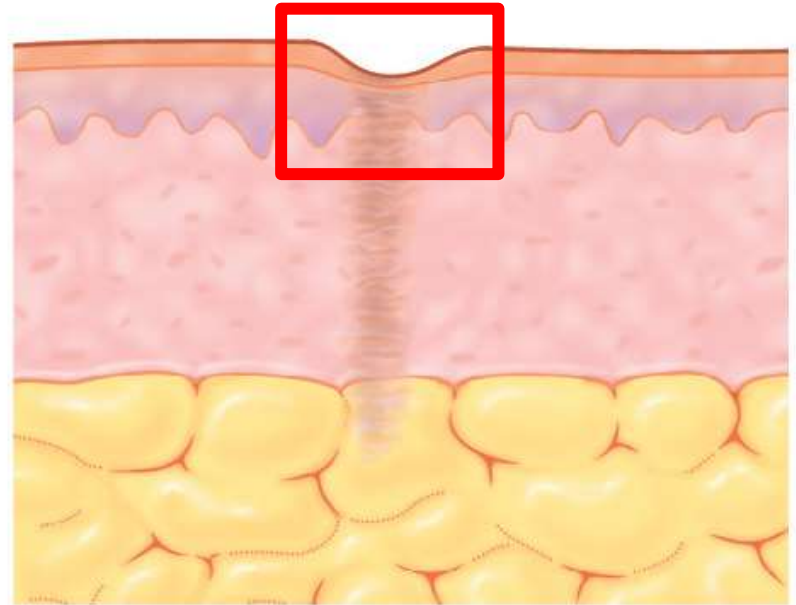
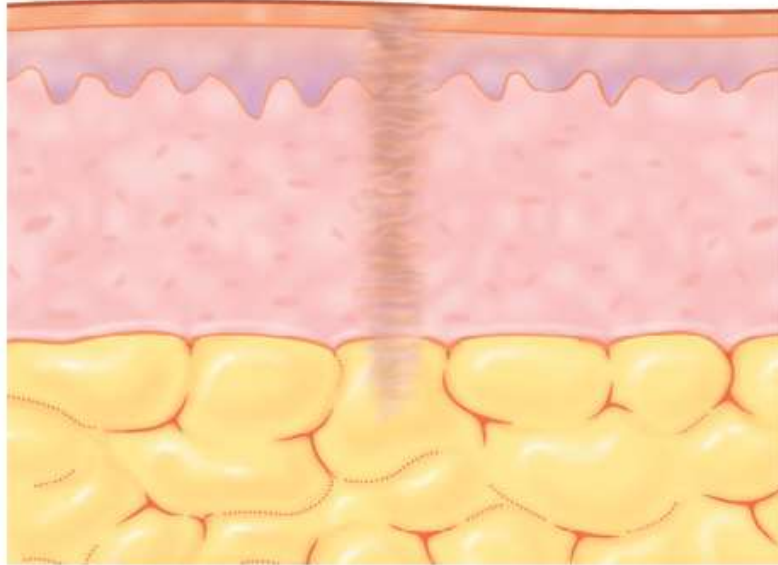
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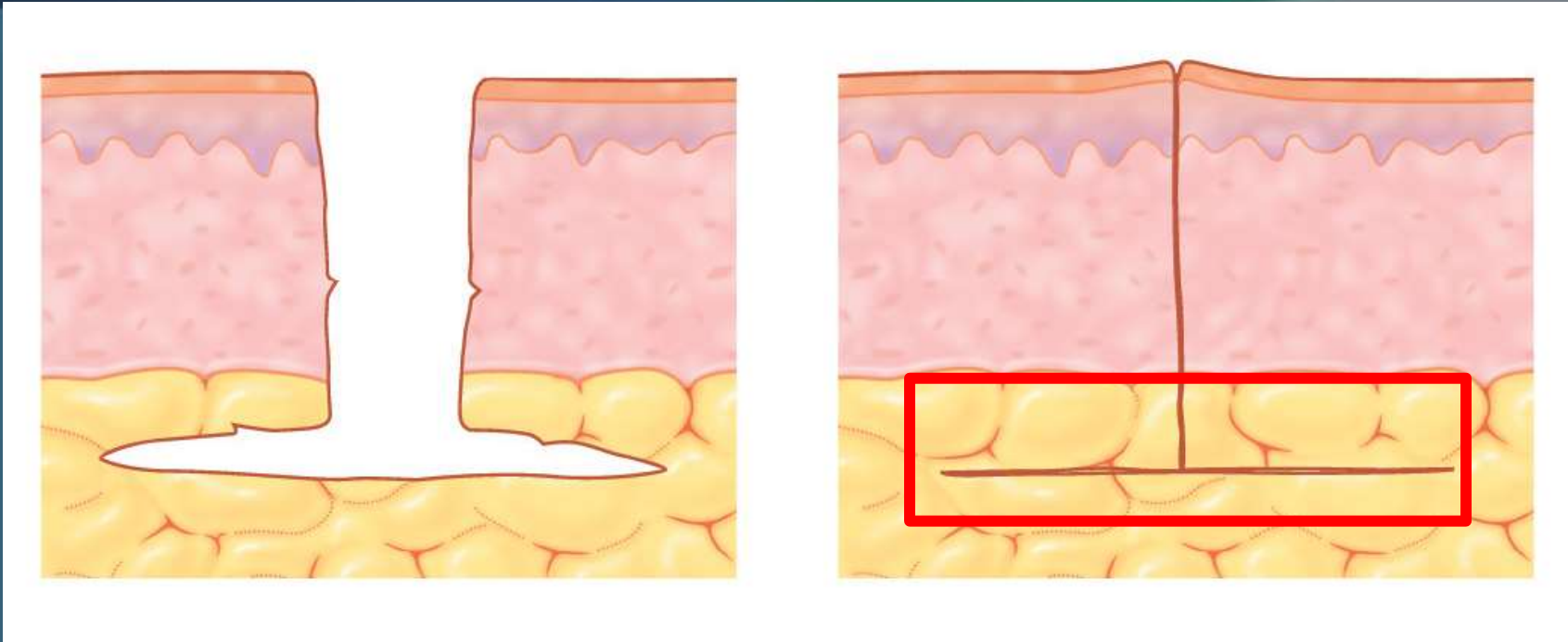
# Undermining



# Undermining

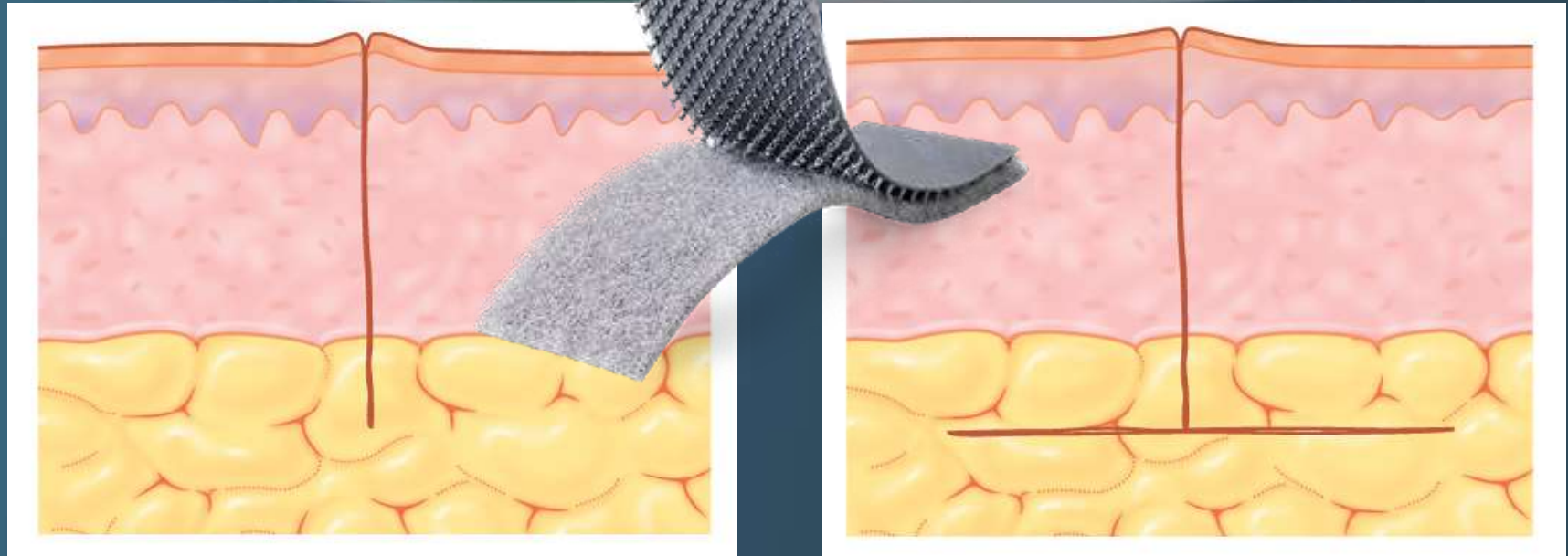


# Undermining

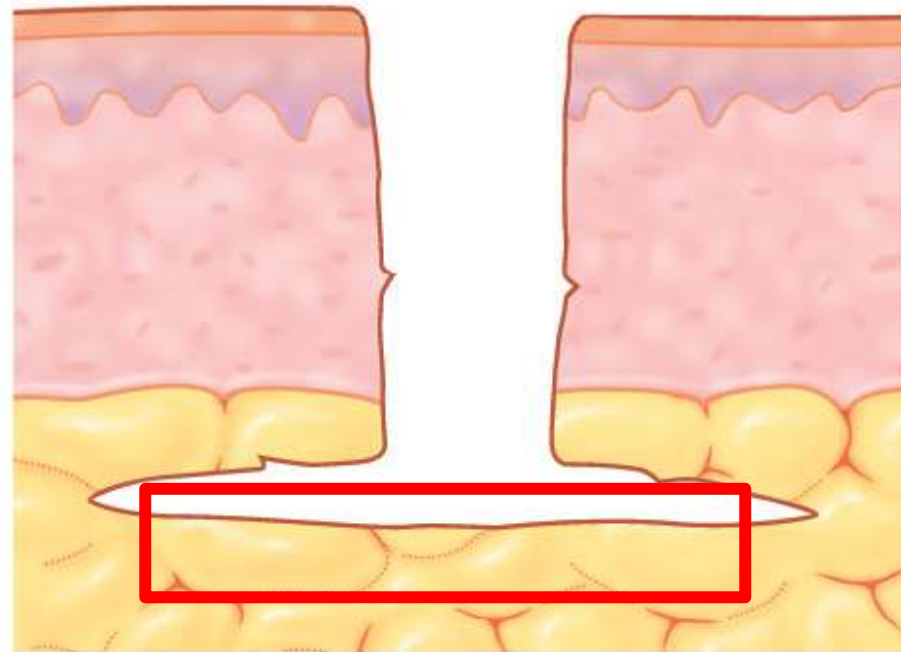
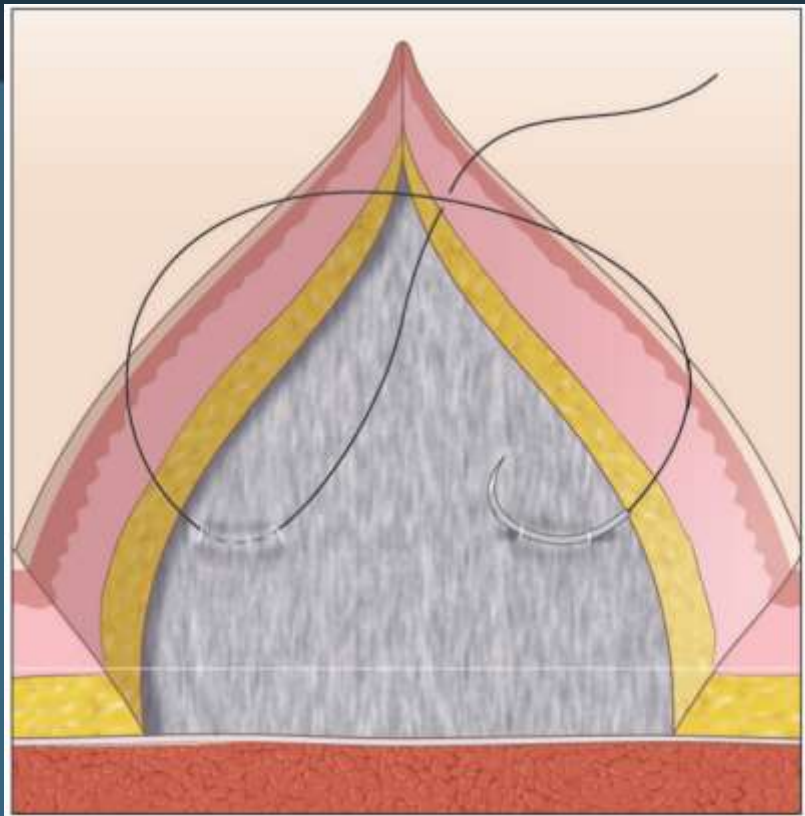




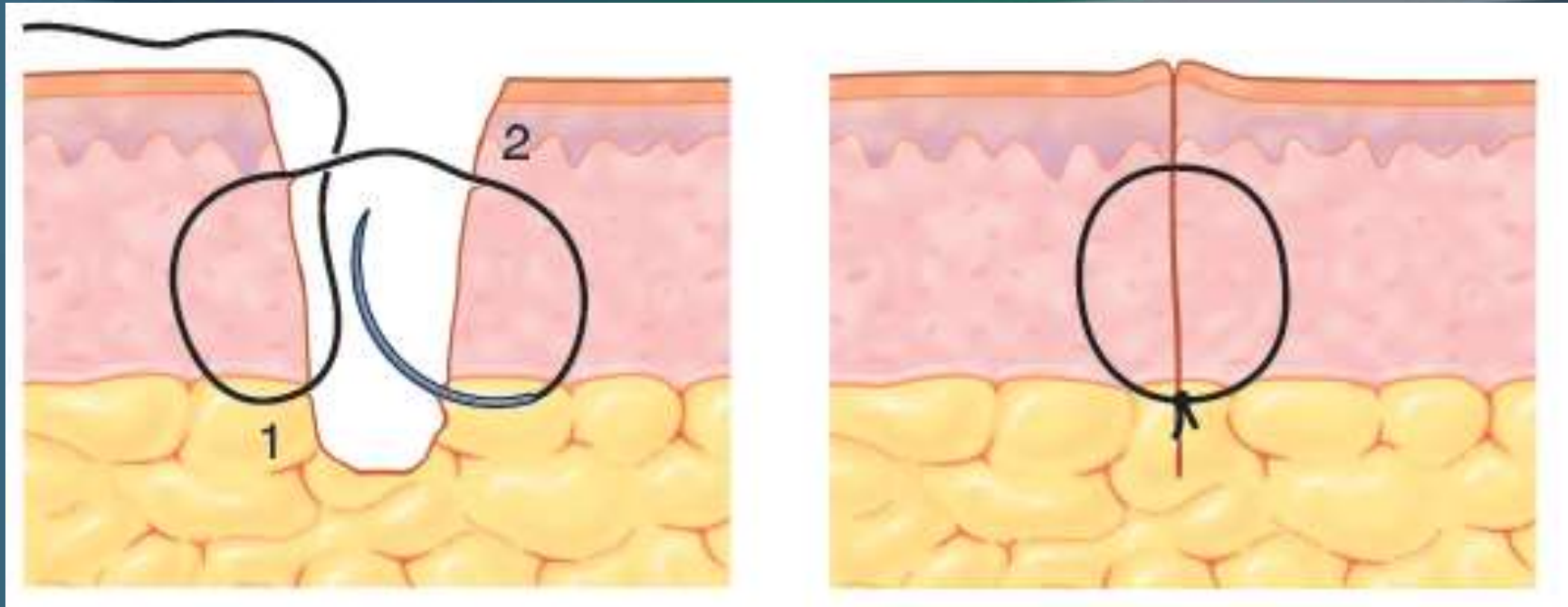
# Undermining



# Plication Sutures



# Deep Sutures



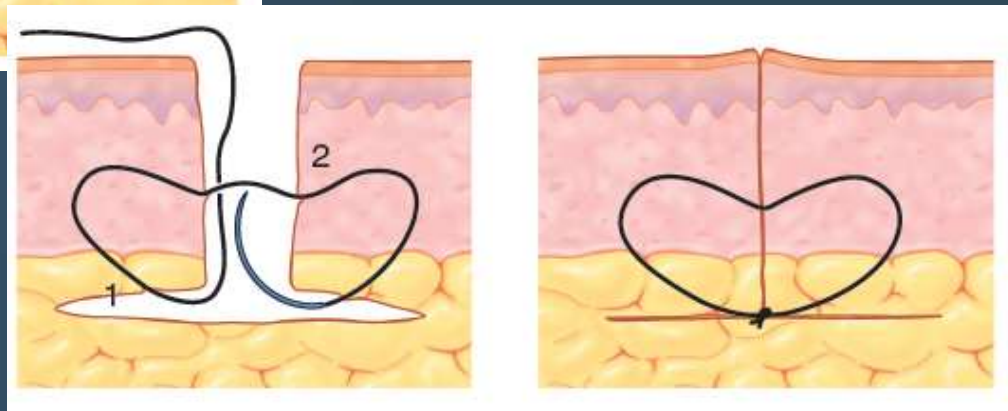
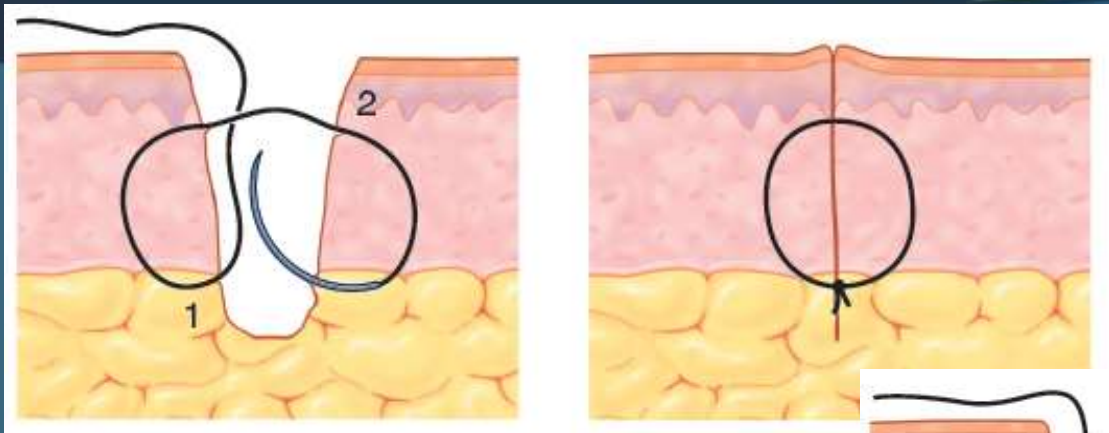




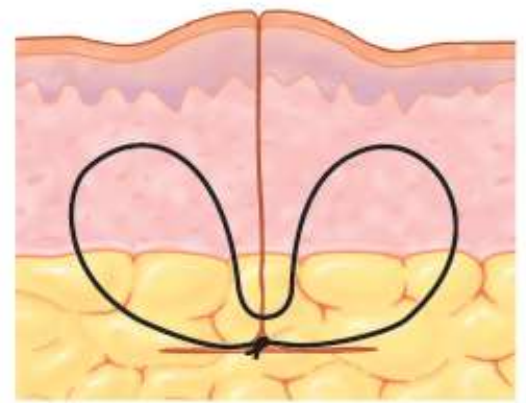
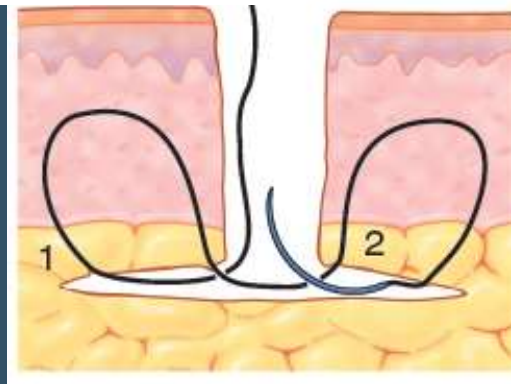
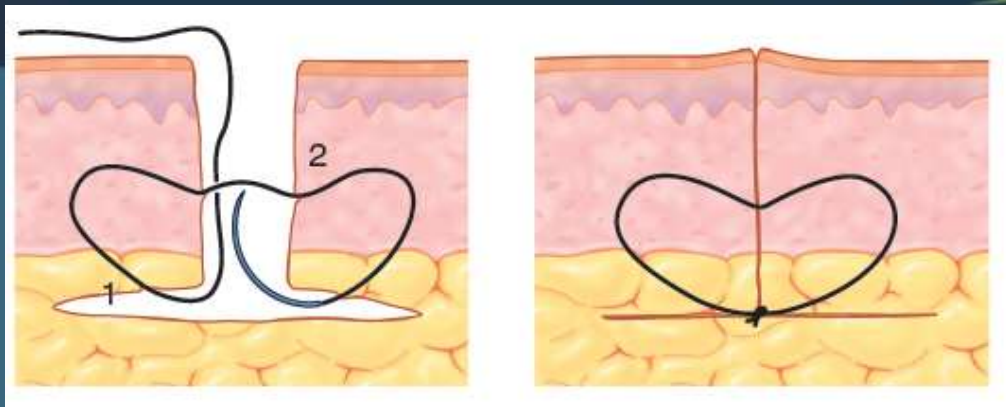
1 week follow up



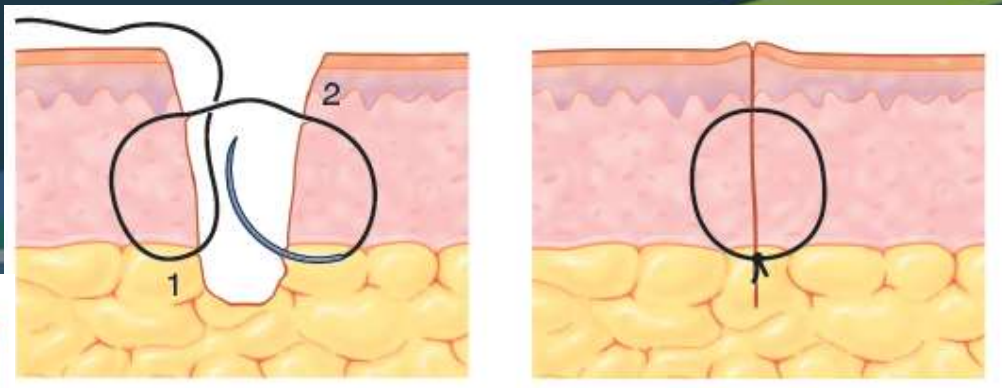
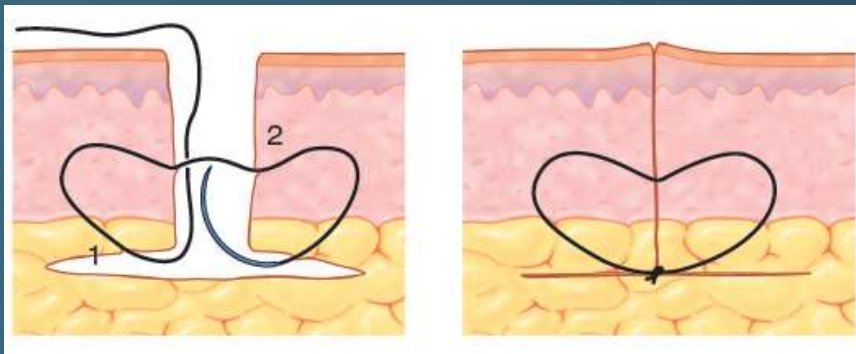
# Deep Sutures



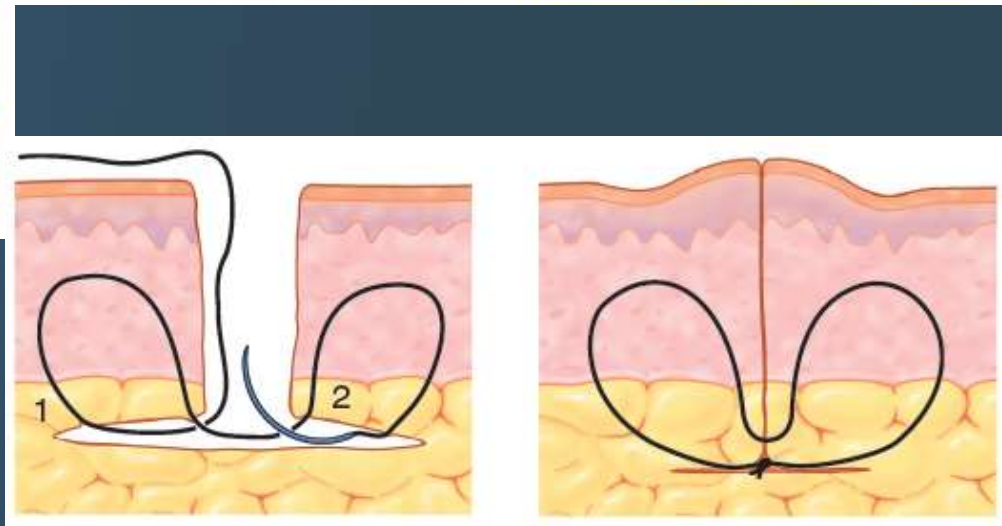
# Deep Sutures



# Deep Sutures



Polyglactin 910 or Polydioxanone





# Top Sutures



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Smallest Caliber that will do what you need

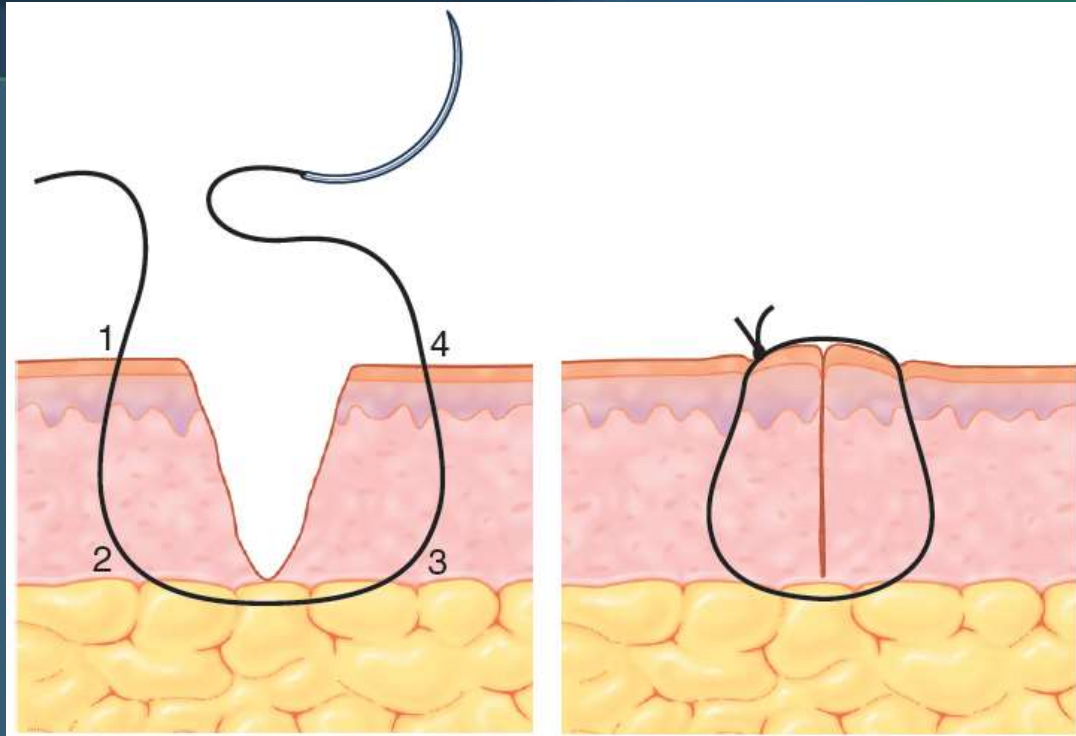
- 5-0 and smaller shouldn't make track marks

If deeps are good, try to take them out sooner.  
If not, track marks are better than a wide scar!

Keep them ALMOST loose (skin will swell)



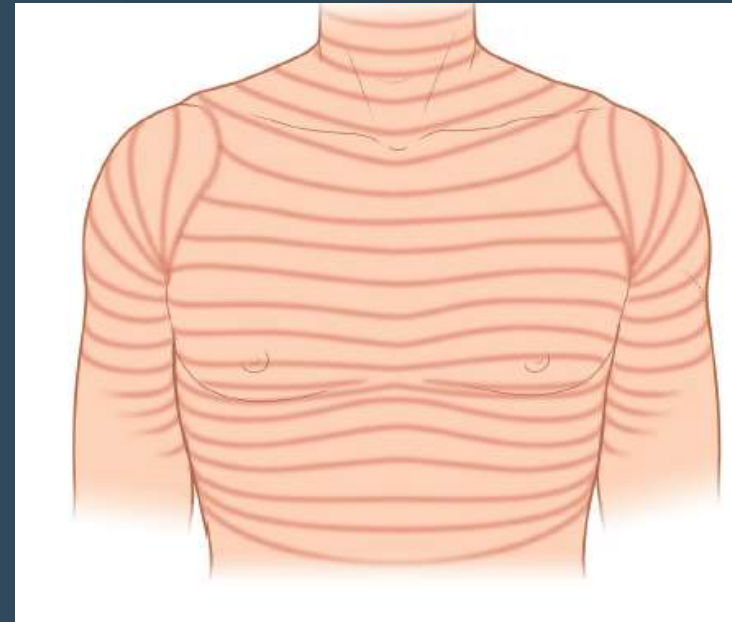
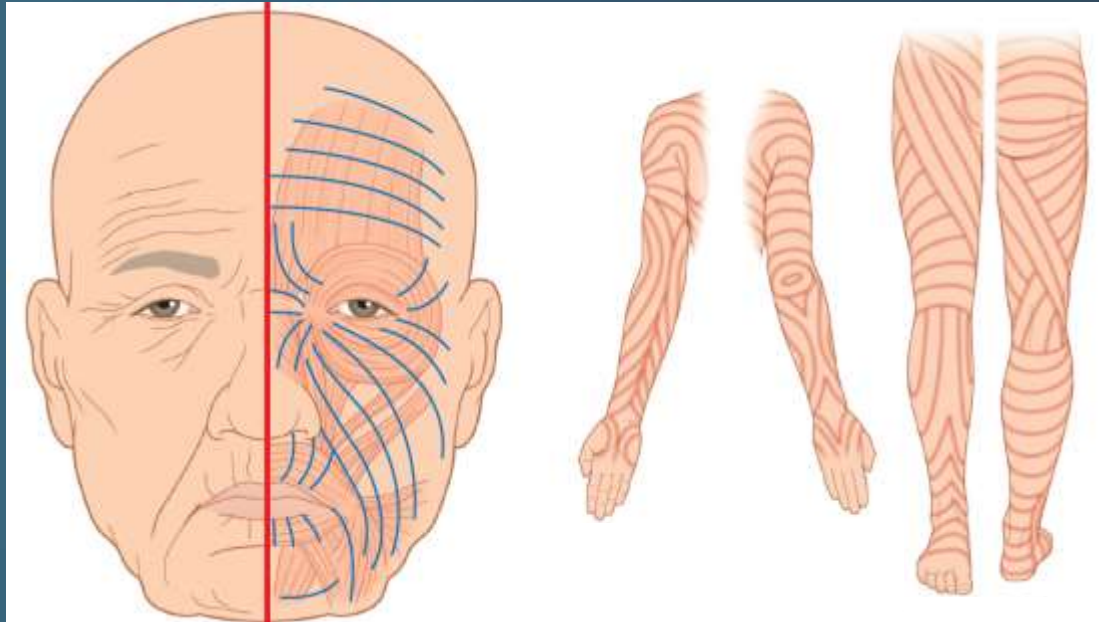
# Top Sutures



# Go with the Flow



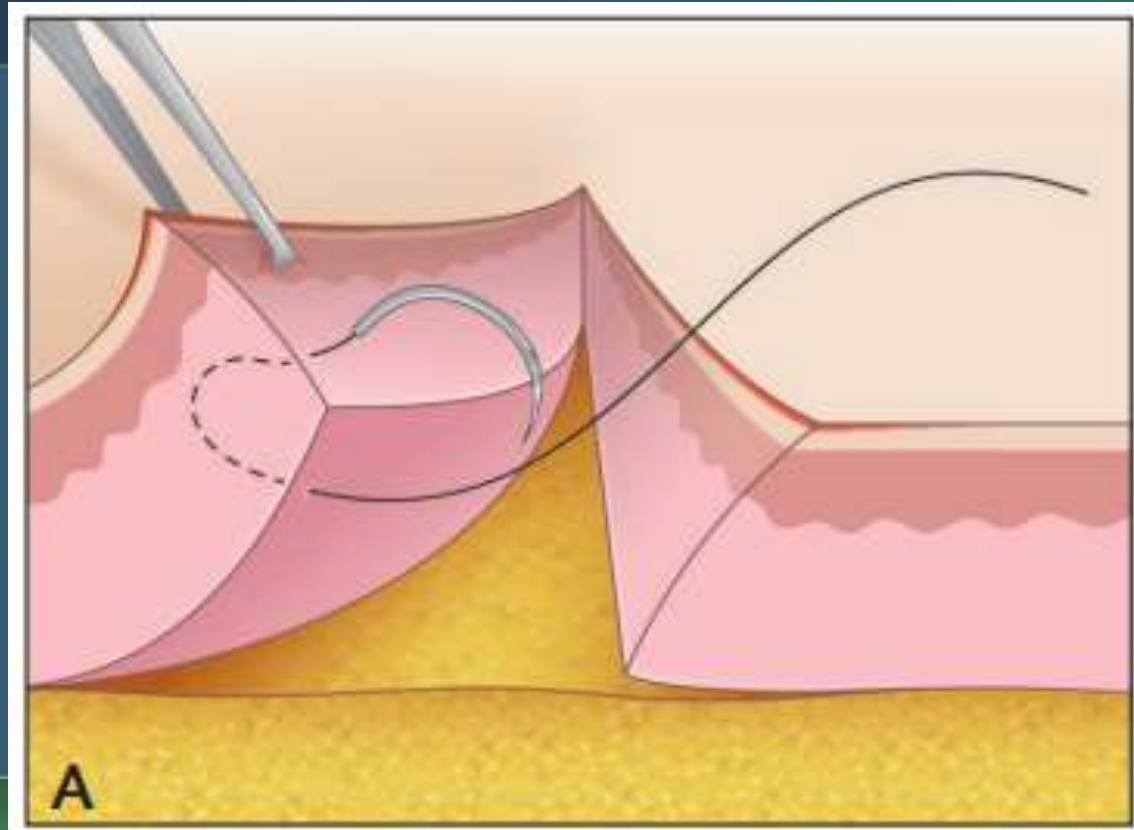
Smush skin or flex muscle in the area



# When handling tissue...



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Kantor, J, Game-changing Suturing Techniques, *Practical Dermatology*. June 2018, pp 51-52





# Putting it all together...





# 3 month follow up



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# 1 month follow up



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# 6 week follow up



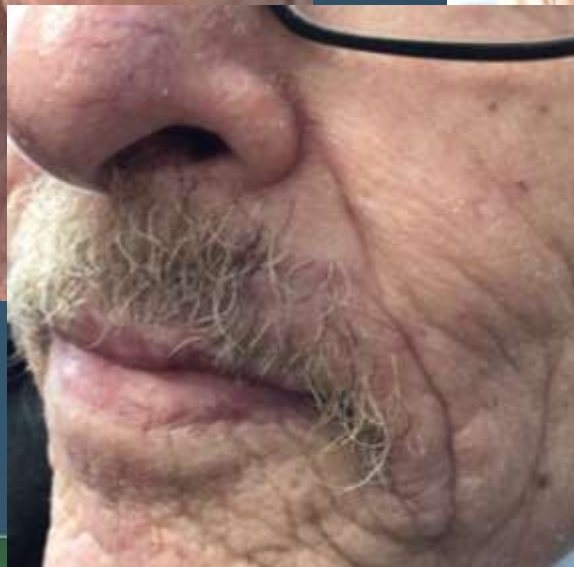
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# 2 month follow up



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# 6 month follow up



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# 6 month follow up



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# 3 month follow up



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# 5 week follow up



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# So when should you involve someone like me?



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It depends on:

1. Your comfort level
2. Location
3. Size of tumor
4. Type of tumor

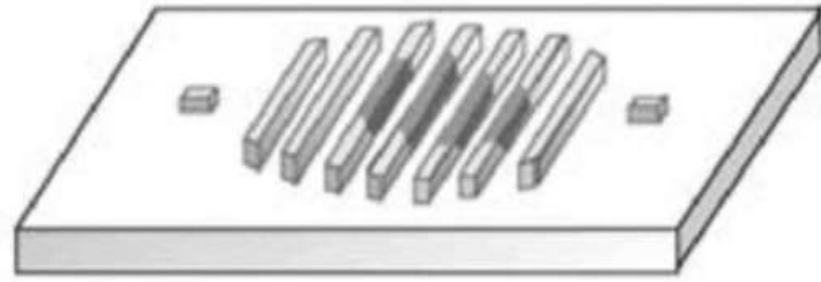
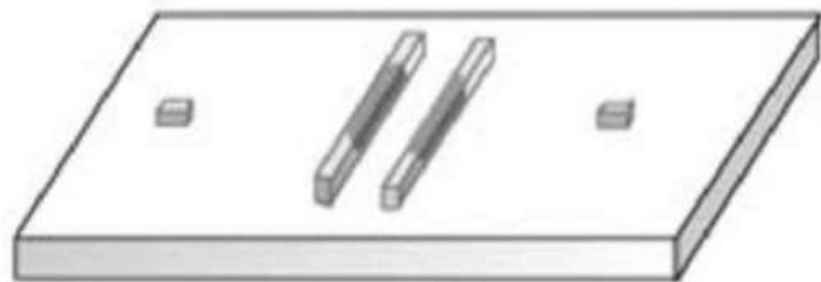
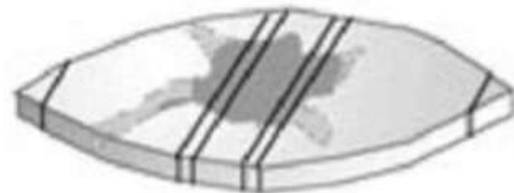
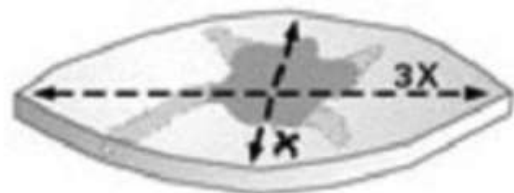


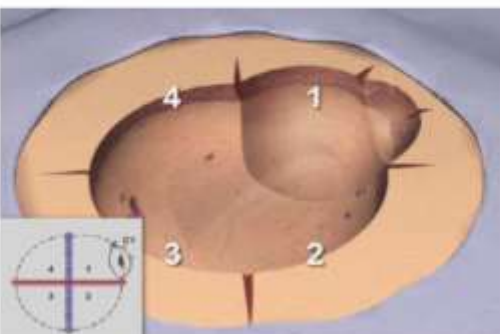
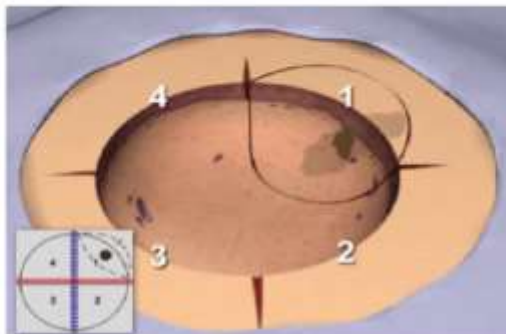
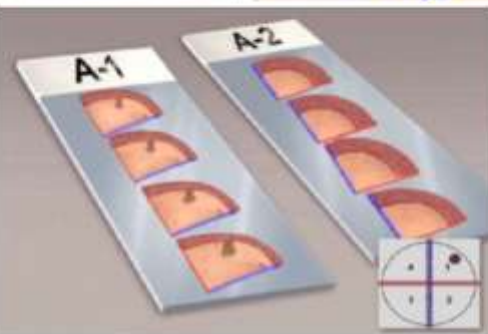
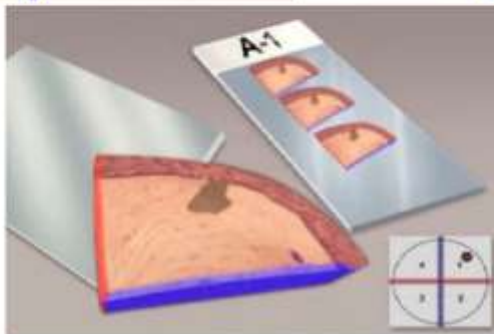
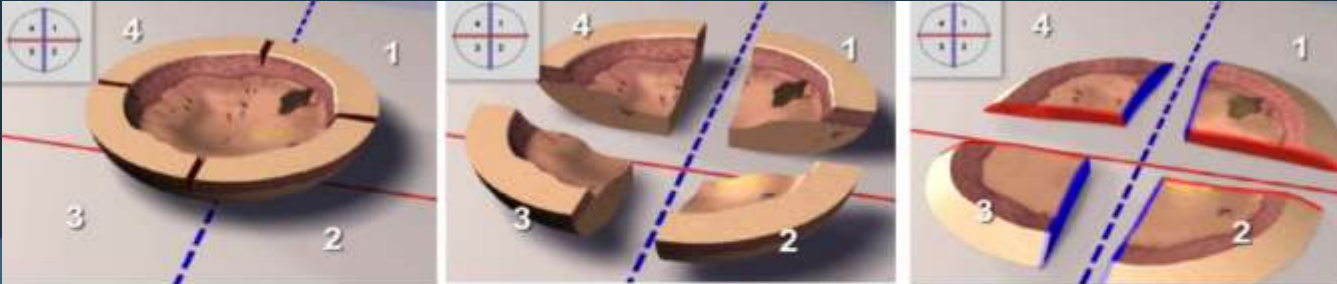


- For skin cancers that spread contiguously
- Higher Cure rate than excision
- Complete margin control of a tumor
- Lower risk procedure
- Cost effective
- Do NOT have to stop blood thinners









# Not appropriate for Mohs



<b>Risk Group</b>	<b>Low Risk</b>
<b>Treatment Options</b>	<a href="#">See BCC-2</a>
<b>H&amp;P</b>	
<b>Location/size</b>	<b>Trunk, extremities &lt;2 cm</b>
<b>Borders</b>	<b>Well-defined</b>
<b>Primary vs. recurrent</b>	<b>Primary</b>
<b>Immunosuppression</b>	<b>(-)</b>
<b>Site of prior RT</b>	<b>(-)</b>
<b>Pathology (<a href="#">See BCC-A</a>)</b>	
<b>Subtype</b>	<b>Nodular, superficial<sup>2</sup></b>
<b>Perineural involvement</b>	<b>(-)</b>





# Thank you

(and remember to wear your sunscreen)



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