Cutting, Sewing & Burning

Fast and Easy Skin Updates for Your Practice

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Learning Objectives

At the end of this hands-on workshop the participant will be able to…

1) List 2 indications for shave biopsy or excision and practice the technique on a model.

2) List 2 indications for electrodesiccation and curettage and practice the technique on a model.

3) List indications for both the figure-of-eight and purse string suture and practice these techniques on a model.

Thanks to Our Vendors

- The vendors have graciously provided instruments and supplies for the workshop, but this cannot be taken as an endorsement by the presenters or the NMAFP. Any decisions regarding purchases or future use of equipment are your responsibility.

Thanks

- John Jones, MD
- Sara Friedberg, MD

Overview

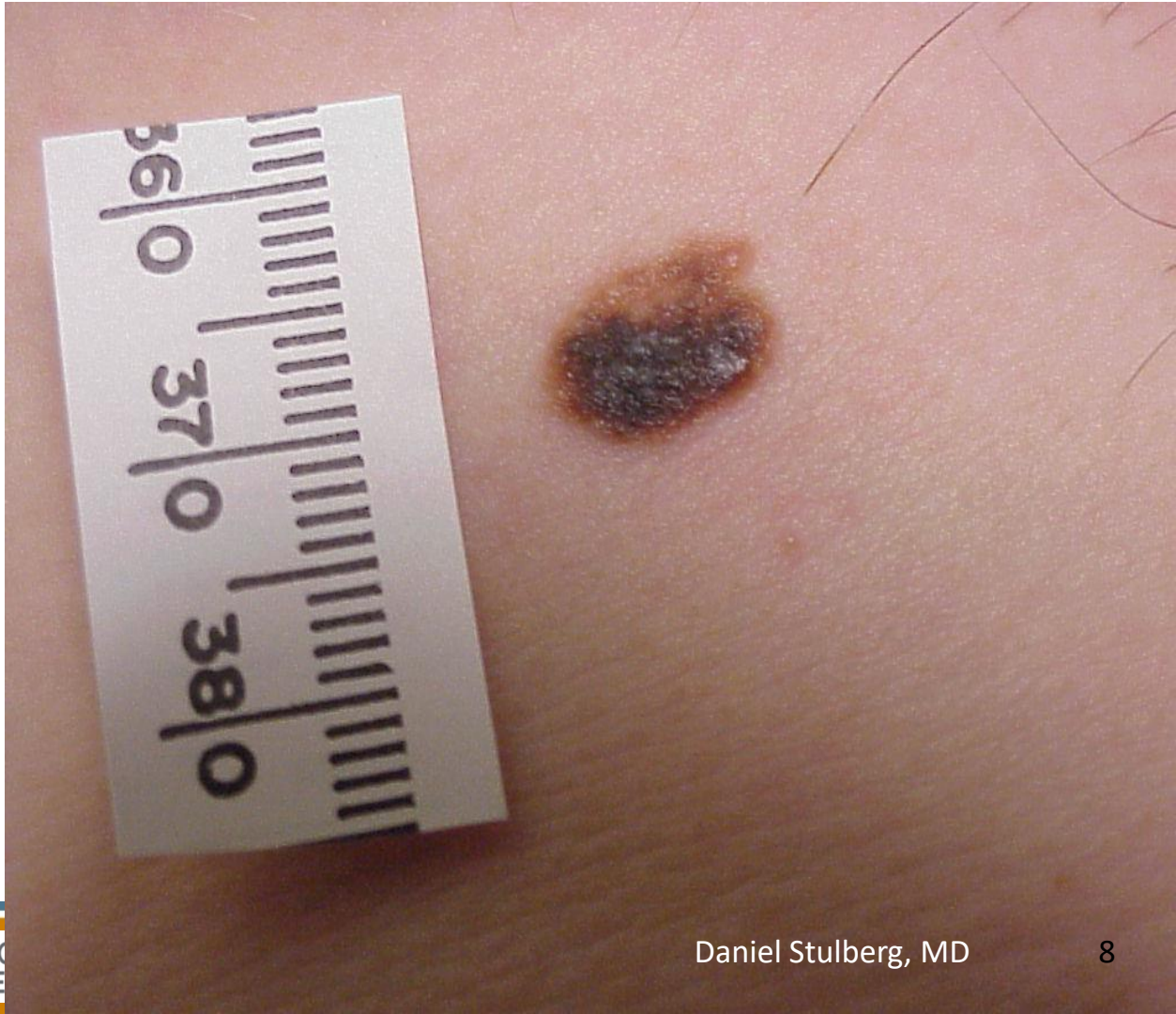
- The ABCDE's
- What to worry about
- Shave biopsy
- Shave excision
- Basic electrosurgery
- Simulated EDC
- Inverted figure 8 suture
- Purse string suture
- Basic cryosurgery

ACS Recommendations Melanoma - What to Look For

- A - Asymmetry within the lesion
- B - Border Irregularity
- C - Color Red, White, Blue or Black or varying color within the lesion
- D - Diameter greater than 6mm, the size of a pencil eraser
- E – Elevation or Evolving

American Cancer Society
www.cancer.org

Examples



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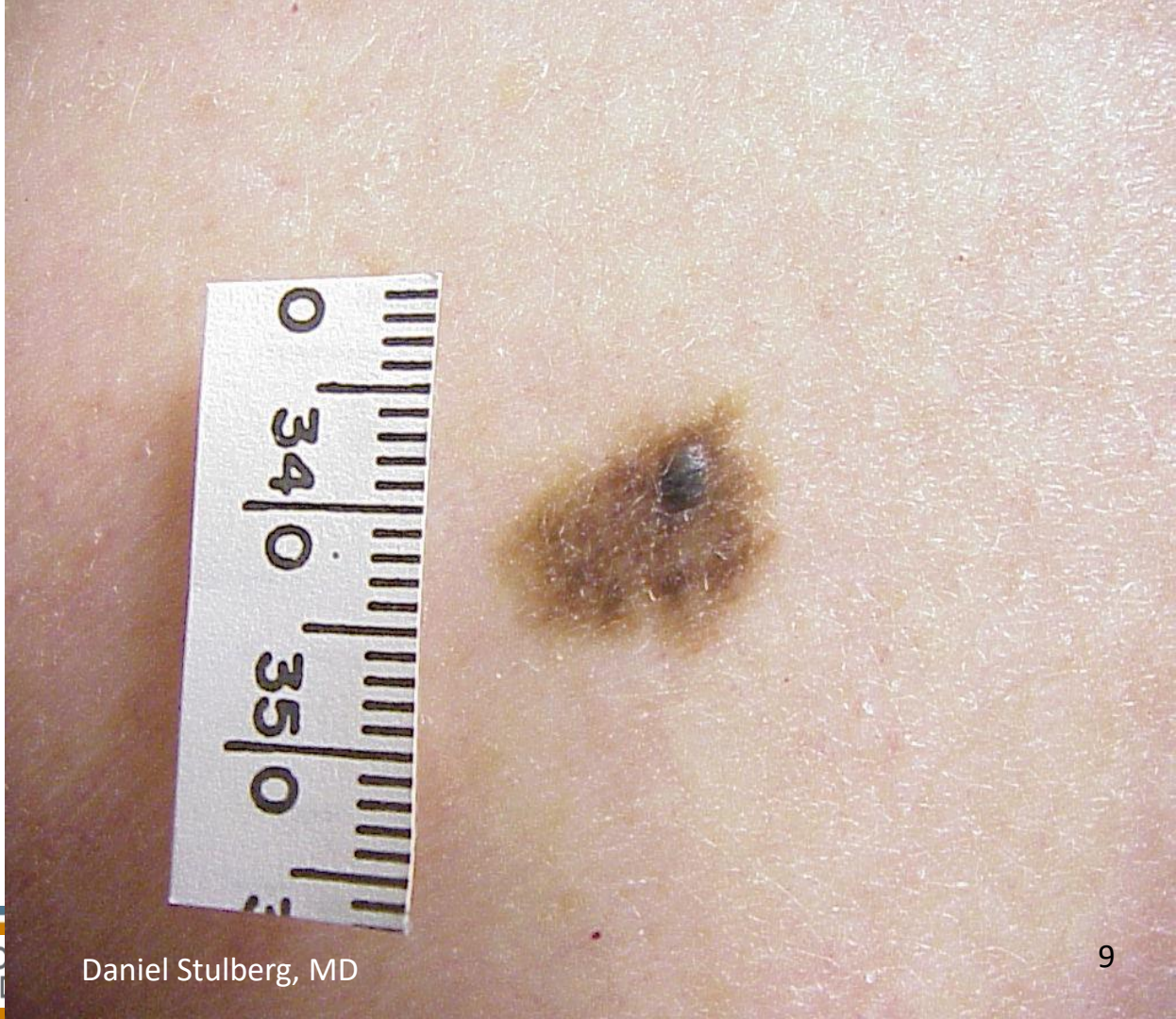

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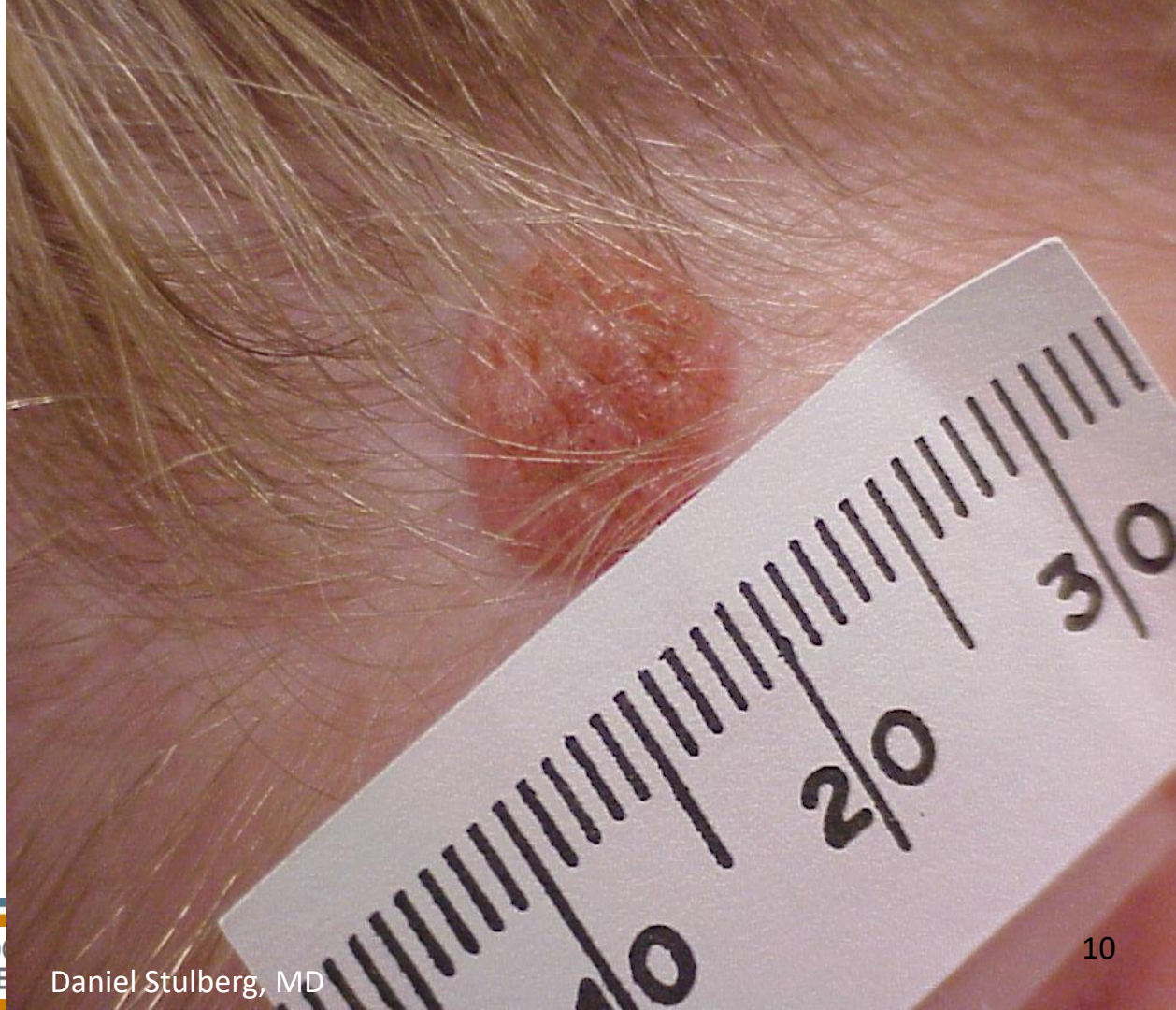
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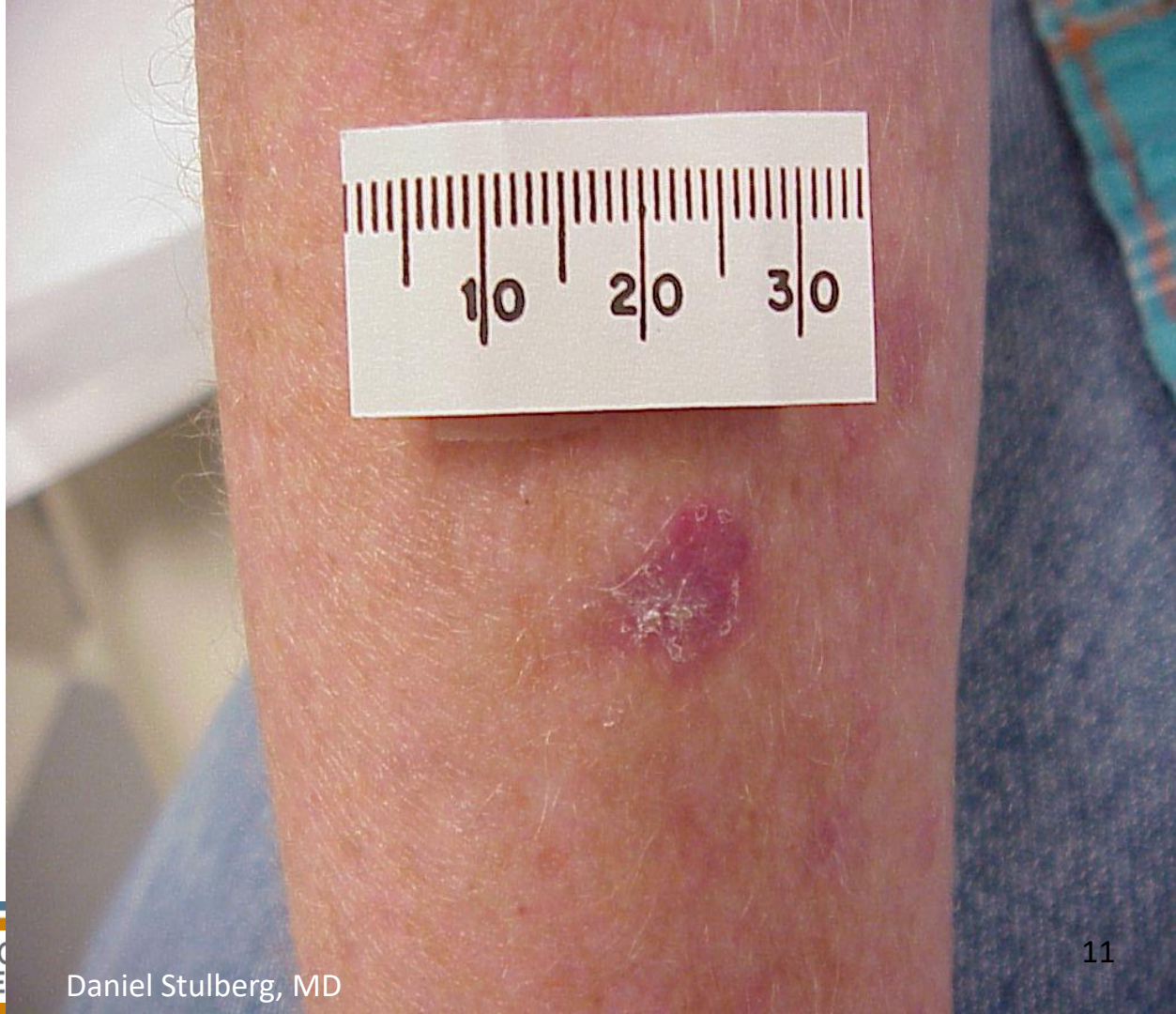

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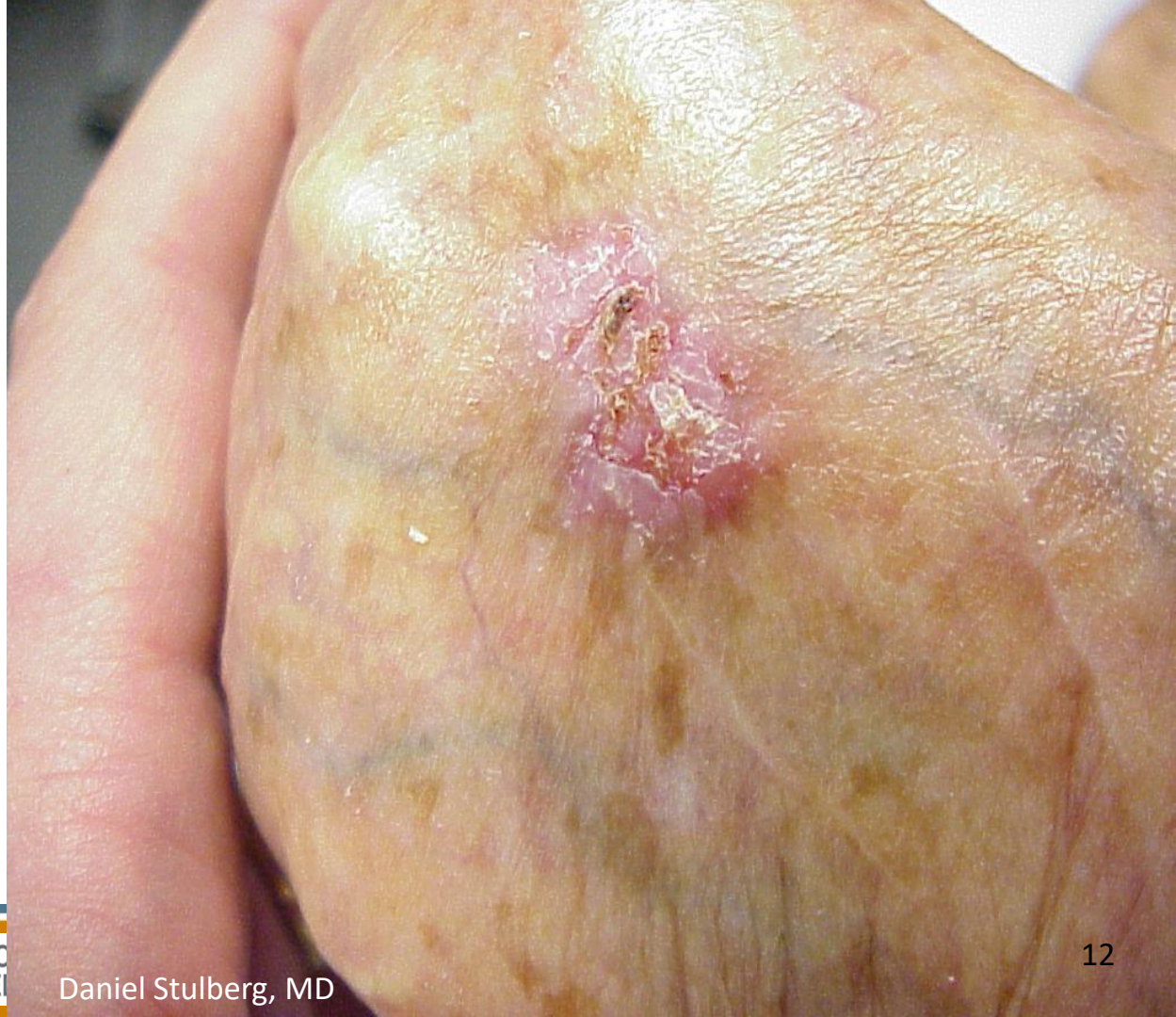

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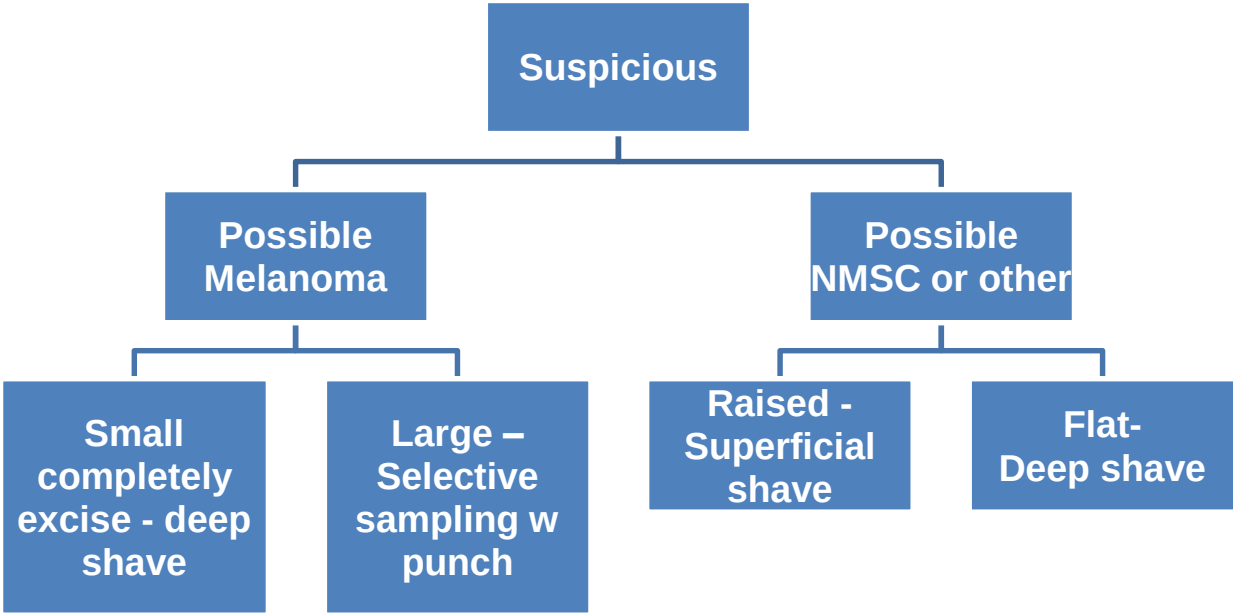
Suspicious Lesion - Options

- Shave biopsy
- Punch biopsy
- Punch excision
- Elliptical excision
- Electrosurgery
- ? Cryosurgery

Approach to Suspicious Lesions



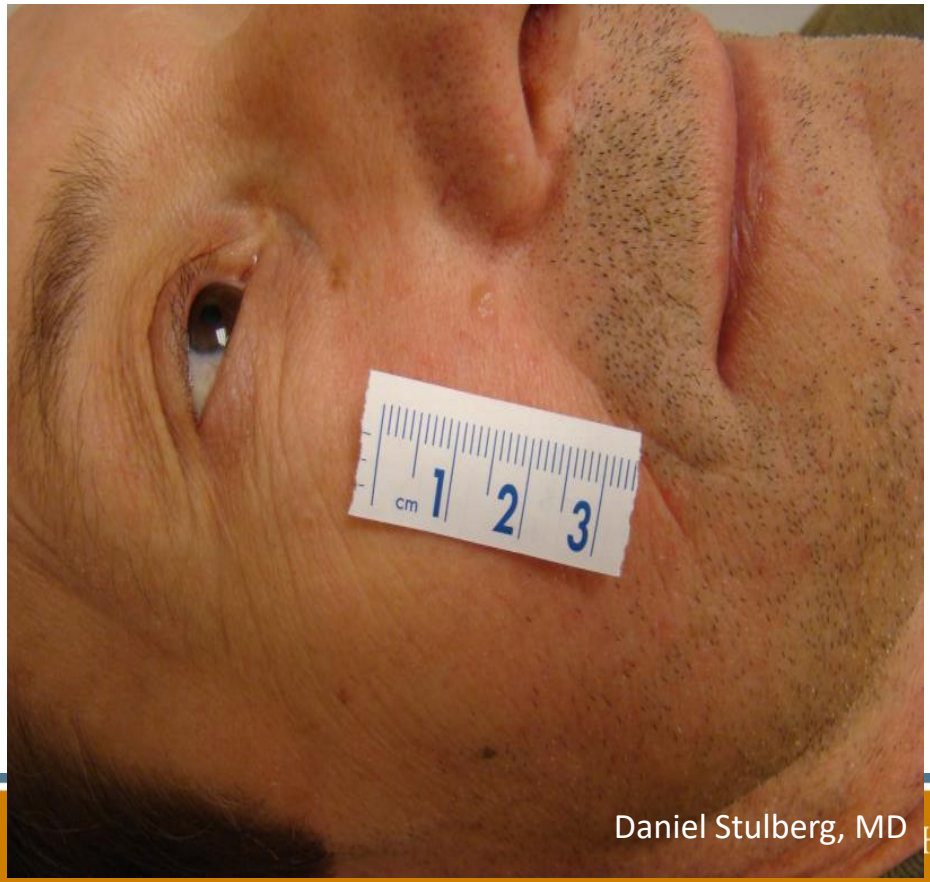
Procedures

- Clean for most
- ?Sterile for excisions with suturing
- Consent
- Time out
- Follow up instructions

Shave Biopsy

- Scalpel 15 or 10 blade
- Or flexible blade

Suspicious Lesion



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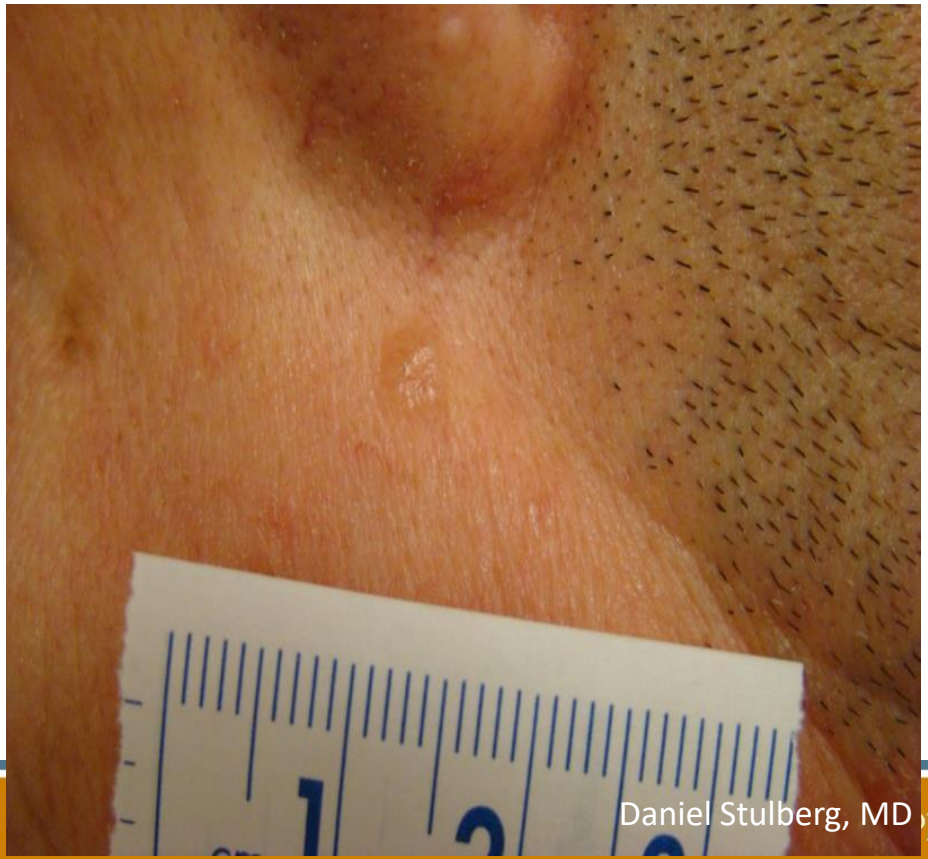
Possible BCC vs Sebaceous Hyperplasia



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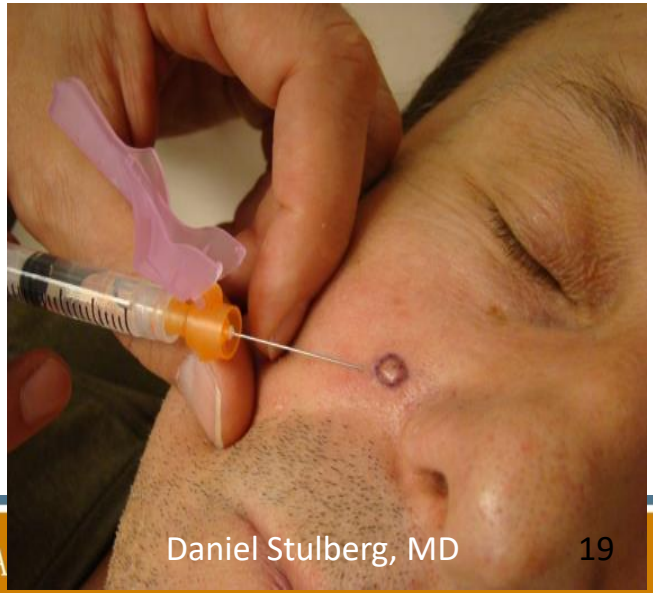
Local Anesthesia

- 1% lidocaine with epinephrine
- local anesthesia not used for:
  - Telangiectasias
  - Small cherry angiomas
  - Small skin tags



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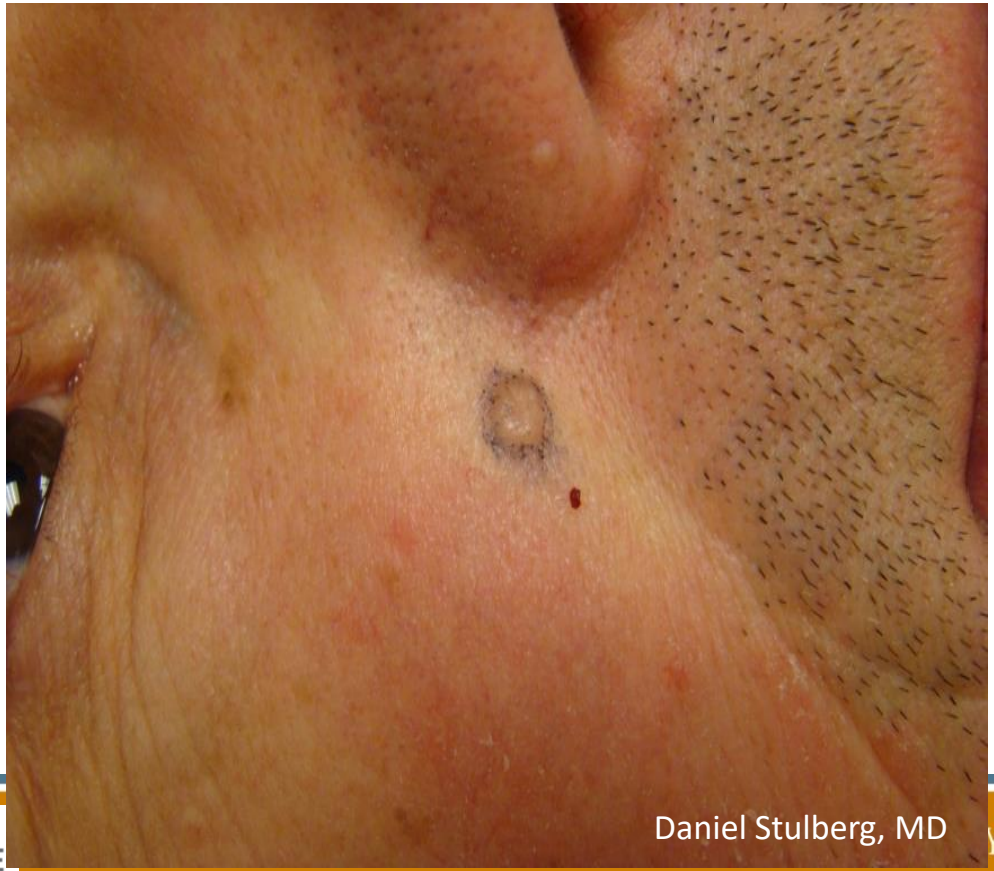
Epinephrine Effect / Time Management



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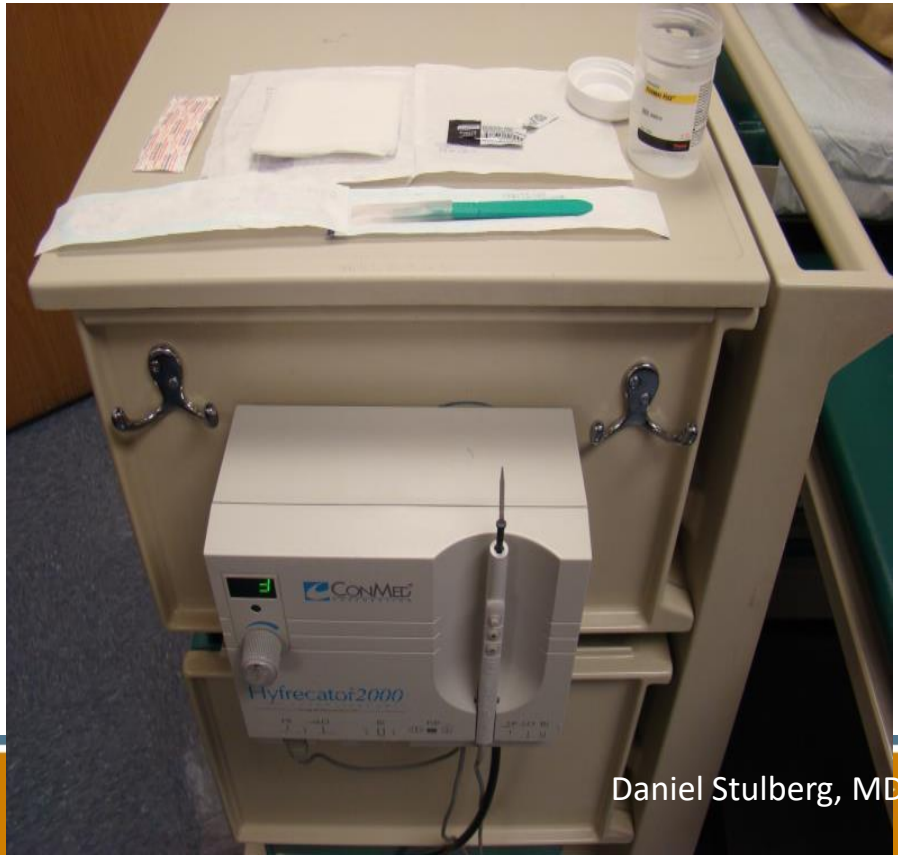
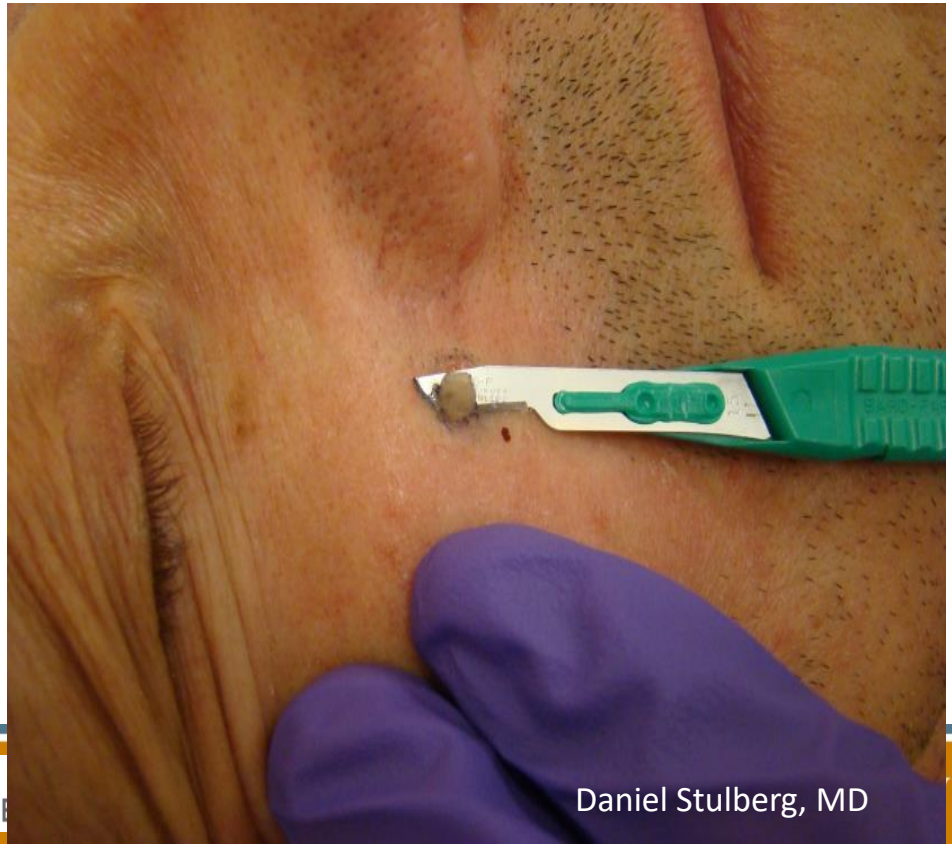
Shave Set Up



Shave – Scalpel or Flexible Blade



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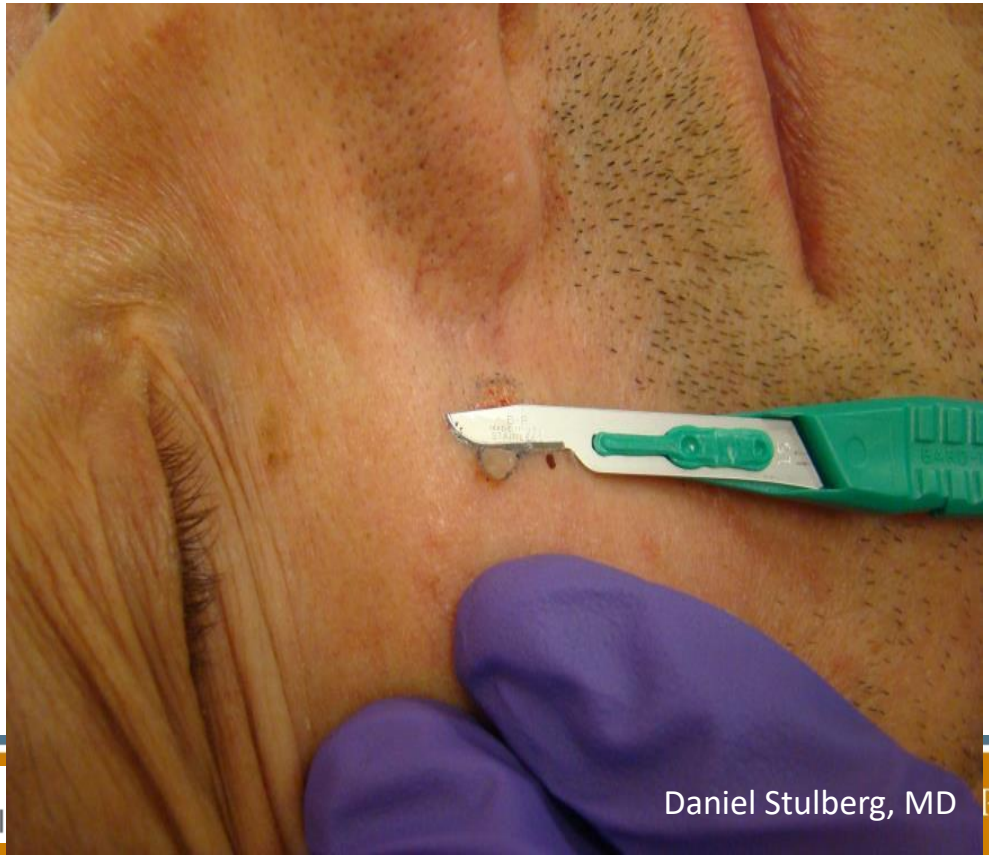
Flip Over's



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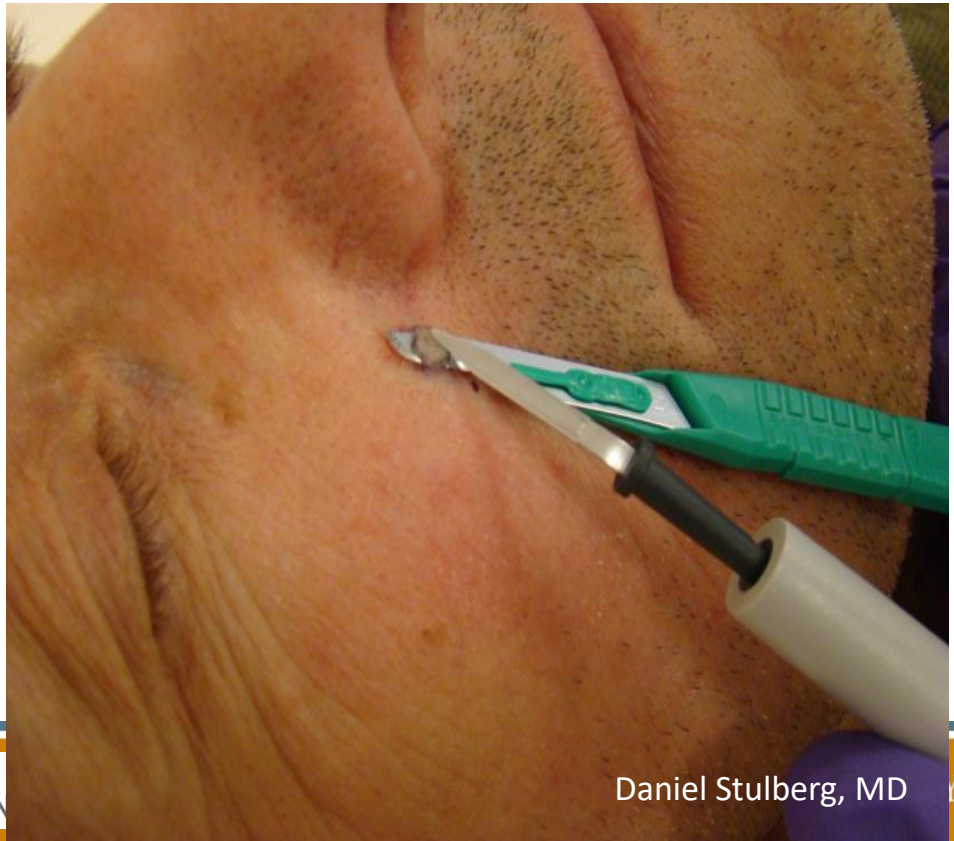
Stabilize Lesion



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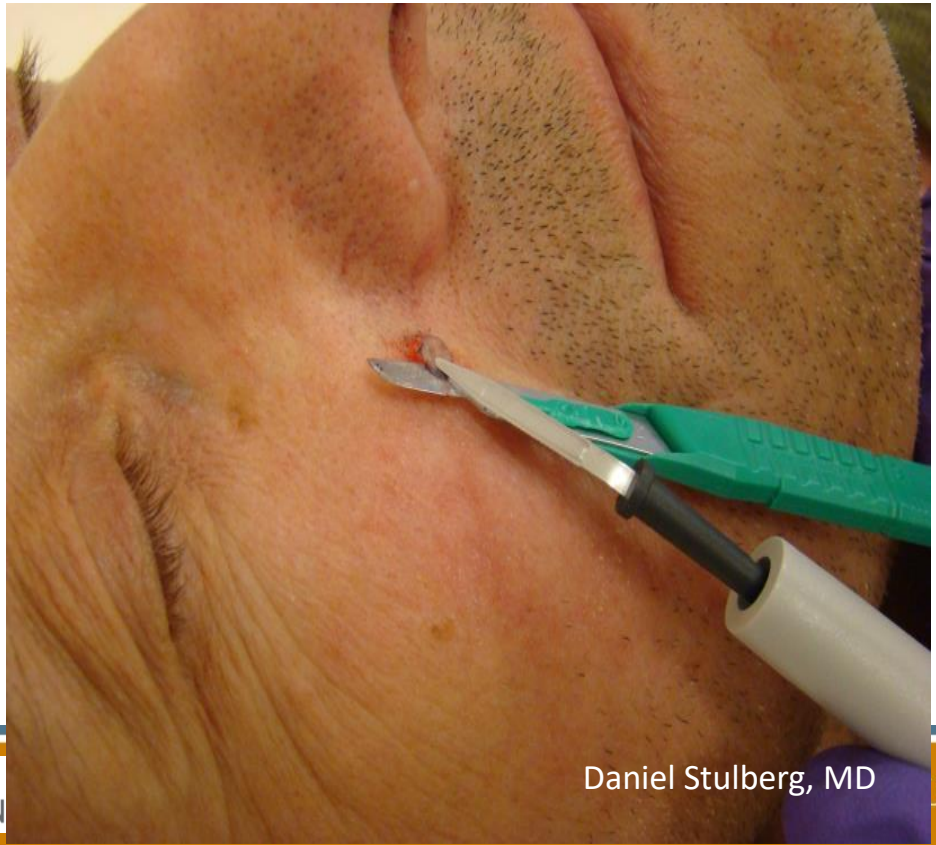
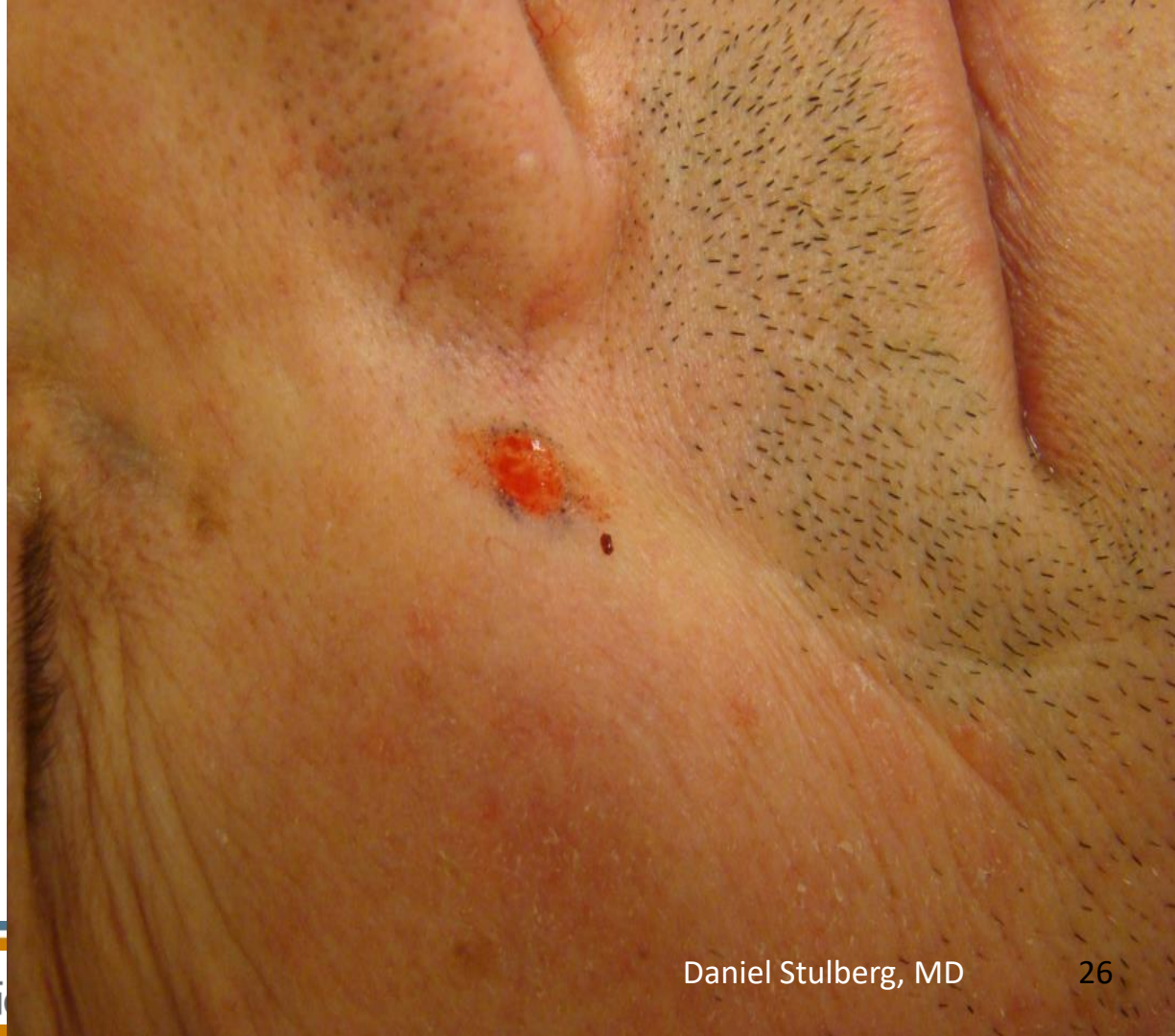
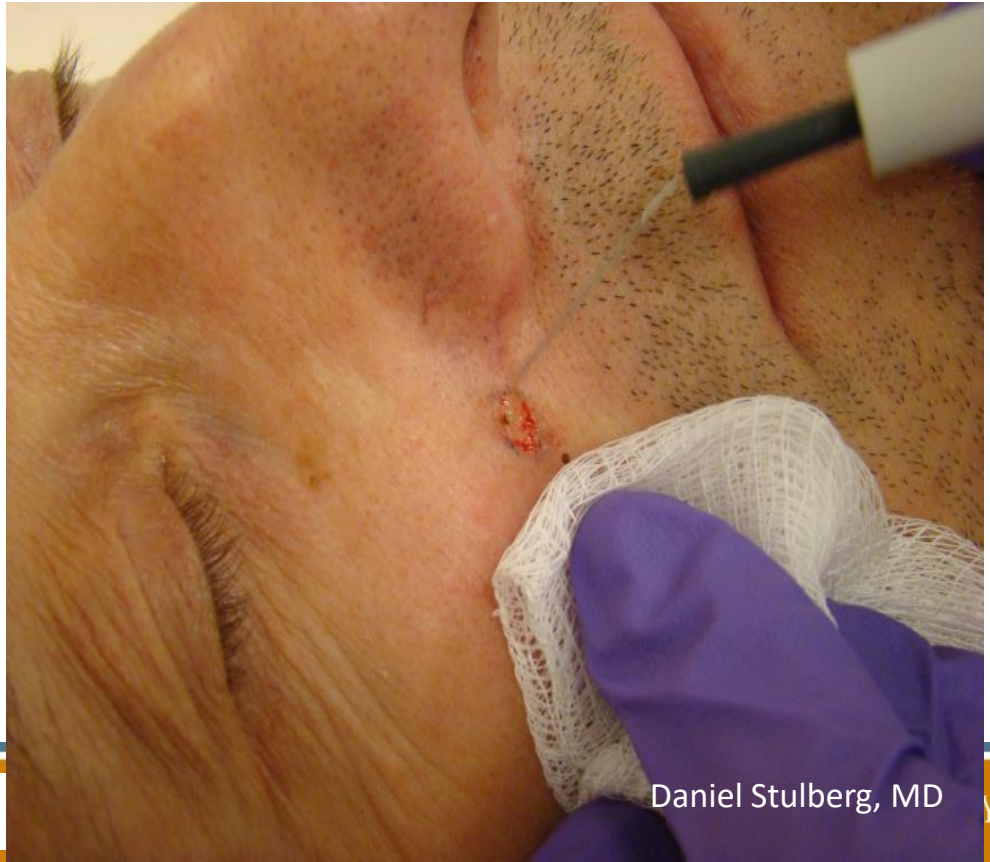
Complete Transection





Dab and Fulgurate/Cauterize



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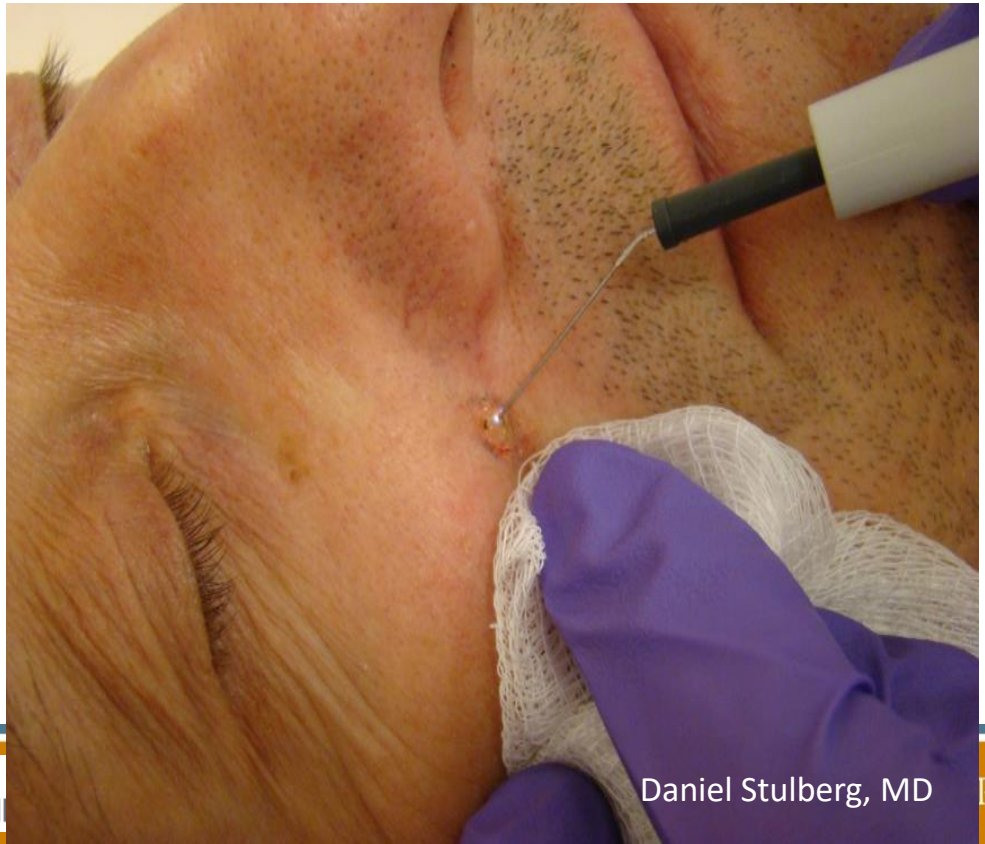
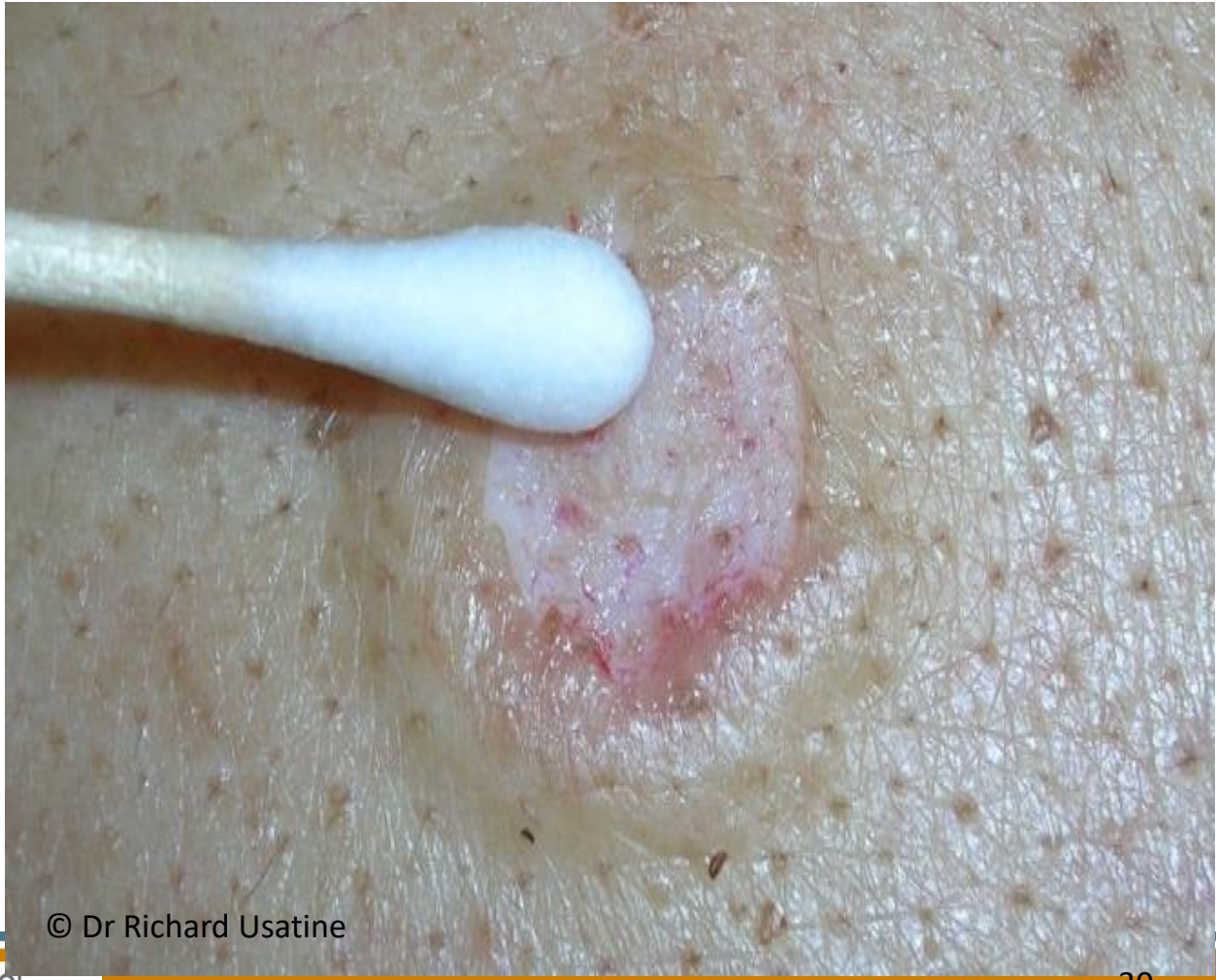
Metal is not hot – Sparks at the gap – Light touch for fulguration



Aluminum Chloride

Courtesy Richard Usatine, MD


© Dr Richard Usatine

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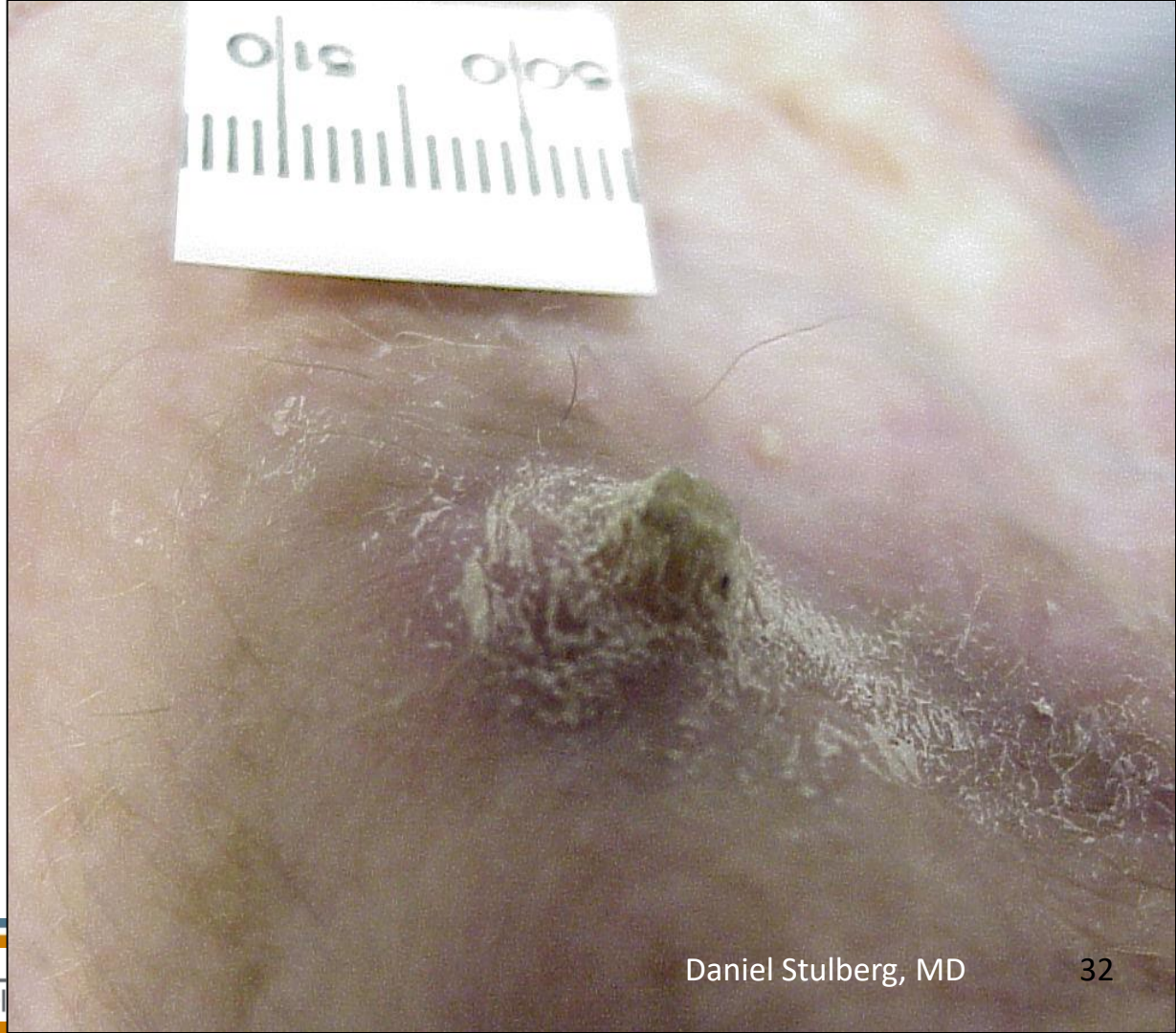

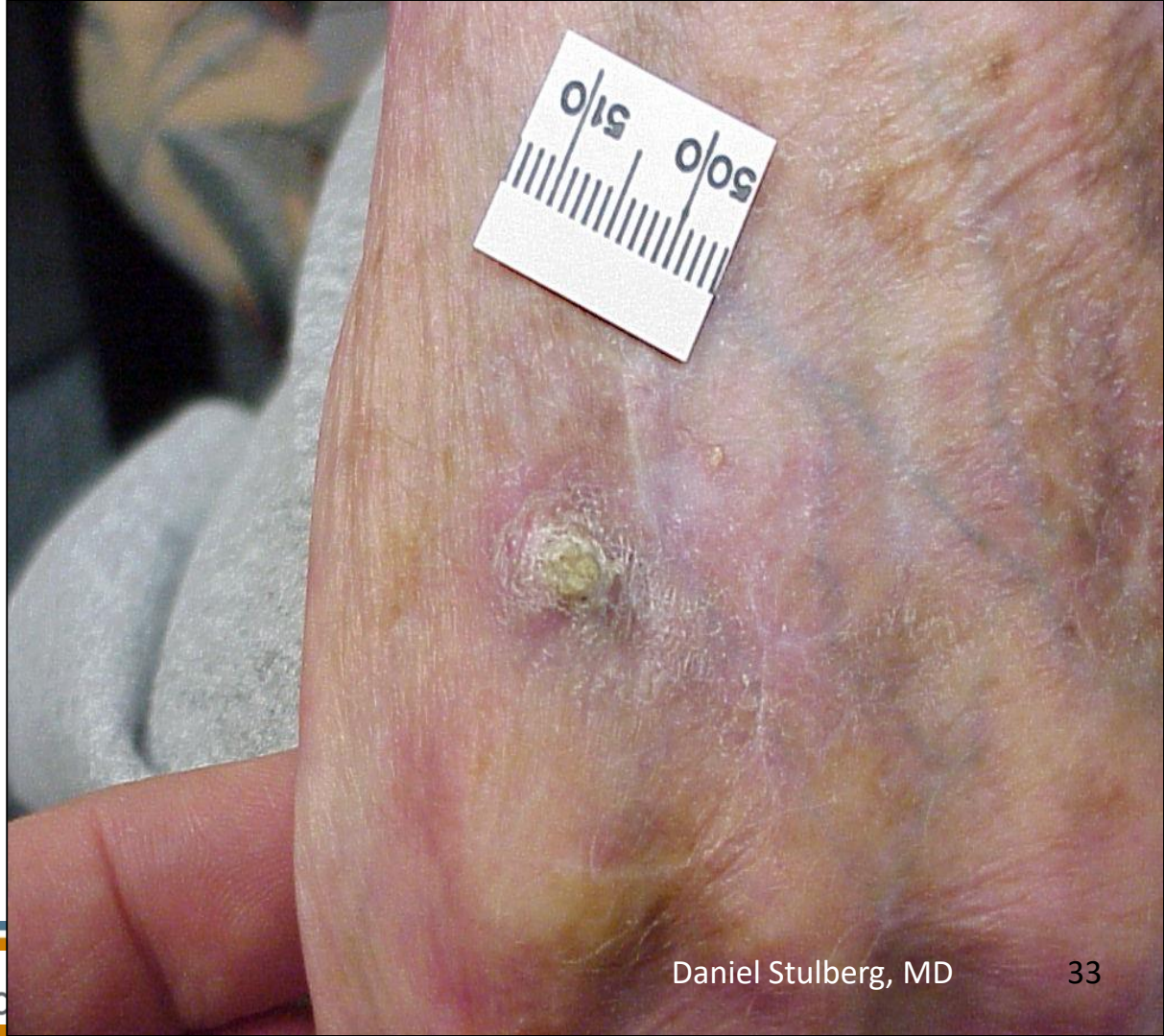
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Practice

- If raised portion of pig's foot, shae it off flat with scalpel
- If no raised portion pinch the skin into a small hill and shave off a 1 mm thick slice

Deep Shave Excision

- Possible melanoma or Macular / Flat lesions
  - Scalpel 15 or 10 blade
  - Personna
  - Gillette
  - Dermablade

Deep Shave - Saucerization

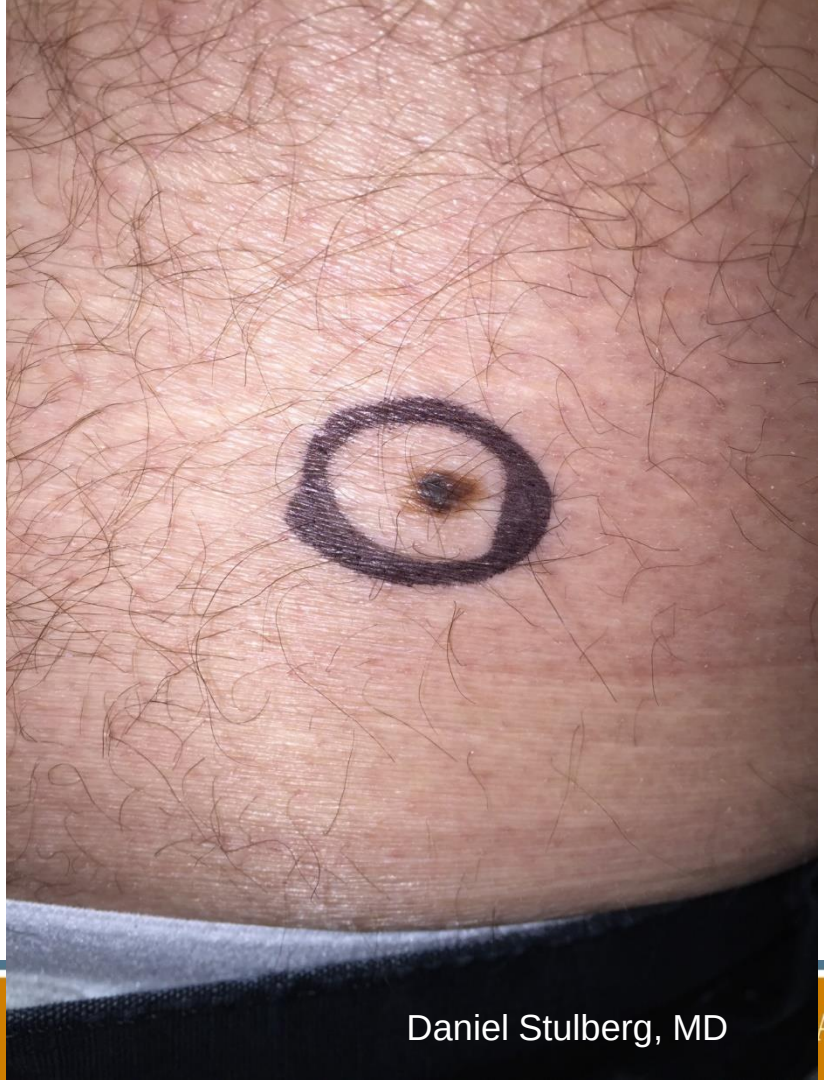
Deep Shave Technique

1st third | 2nd third | final third

30 degree down | horizontal | 30 degree up

Deep Shave Technique

- Slicing not pushing
- 2 actions
  - Pendulum swing
  - Changing level/arc



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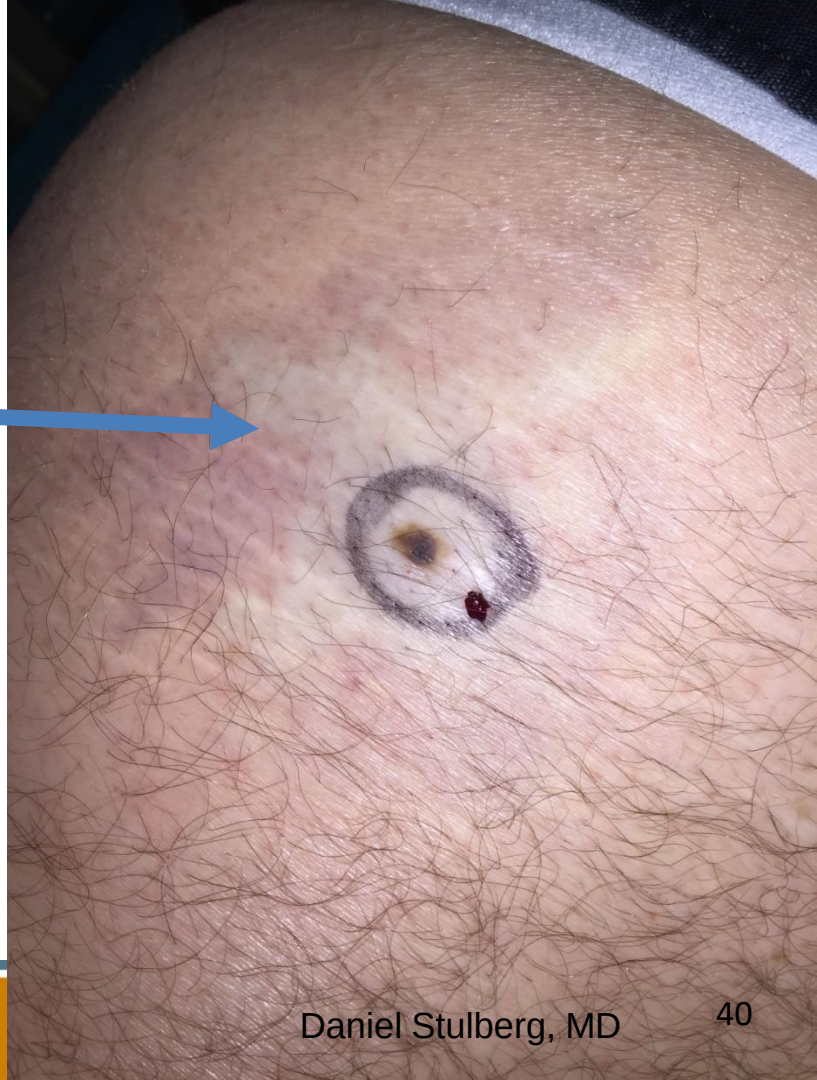
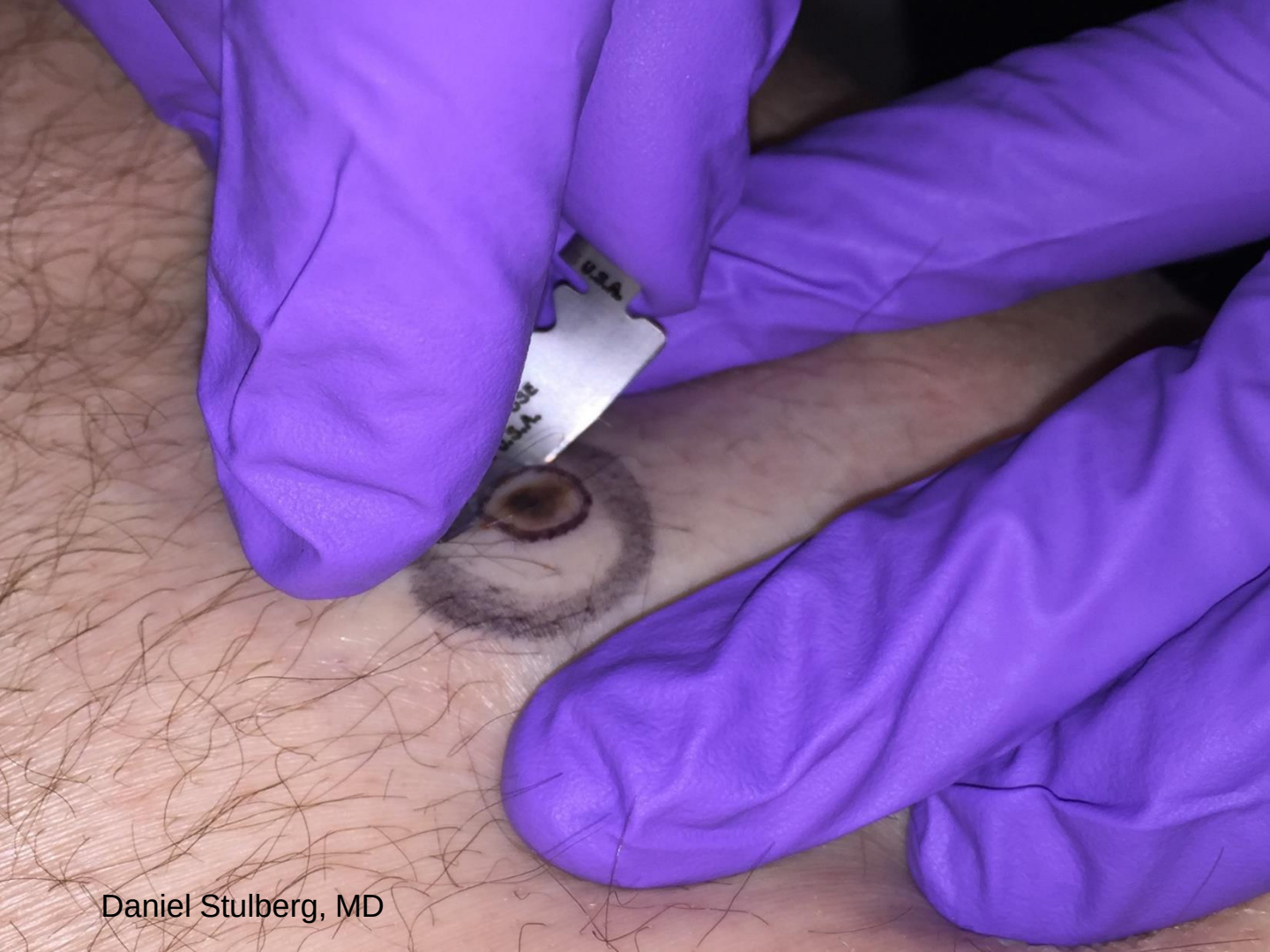
Note epinephrine effect

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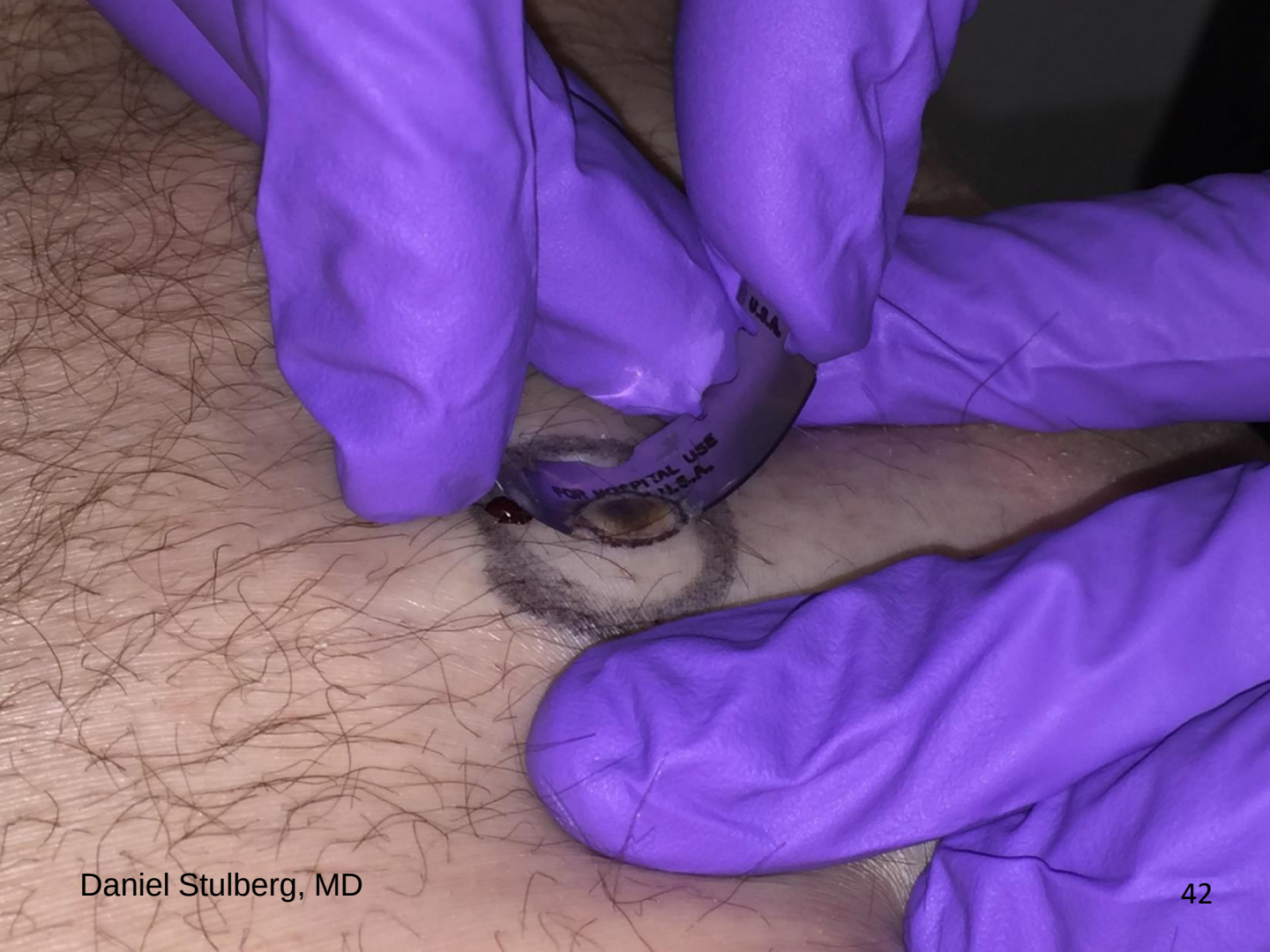
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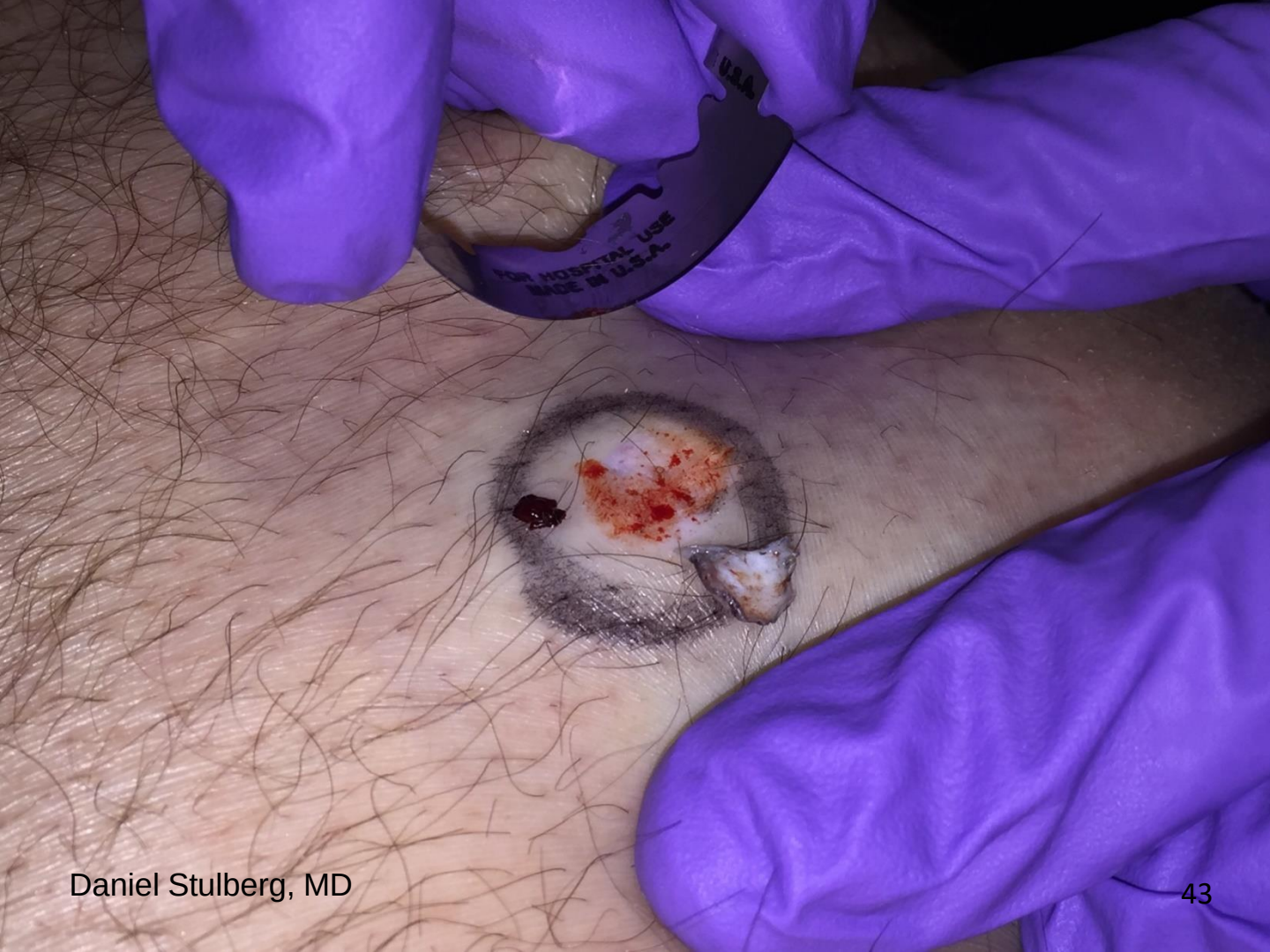
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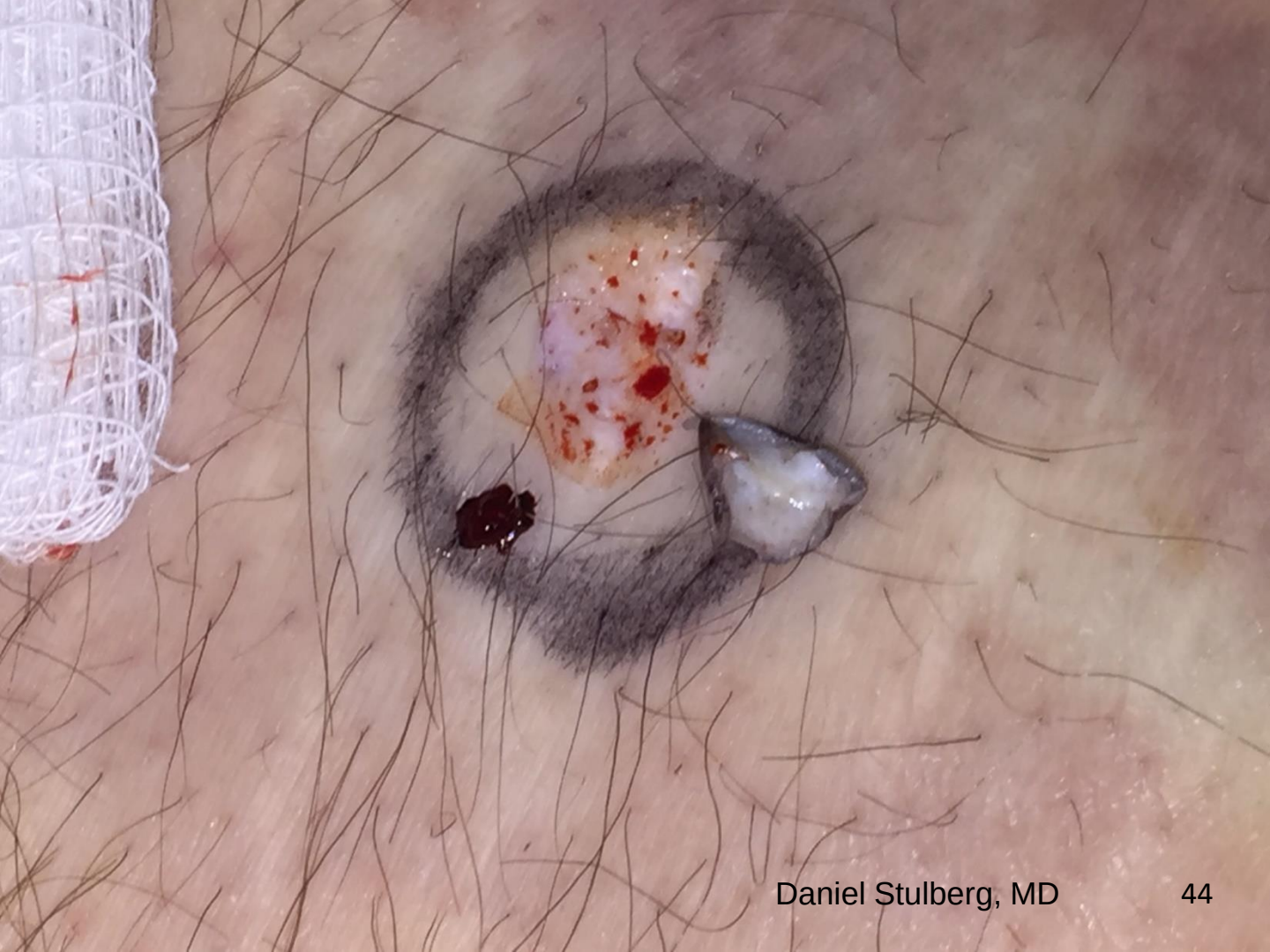

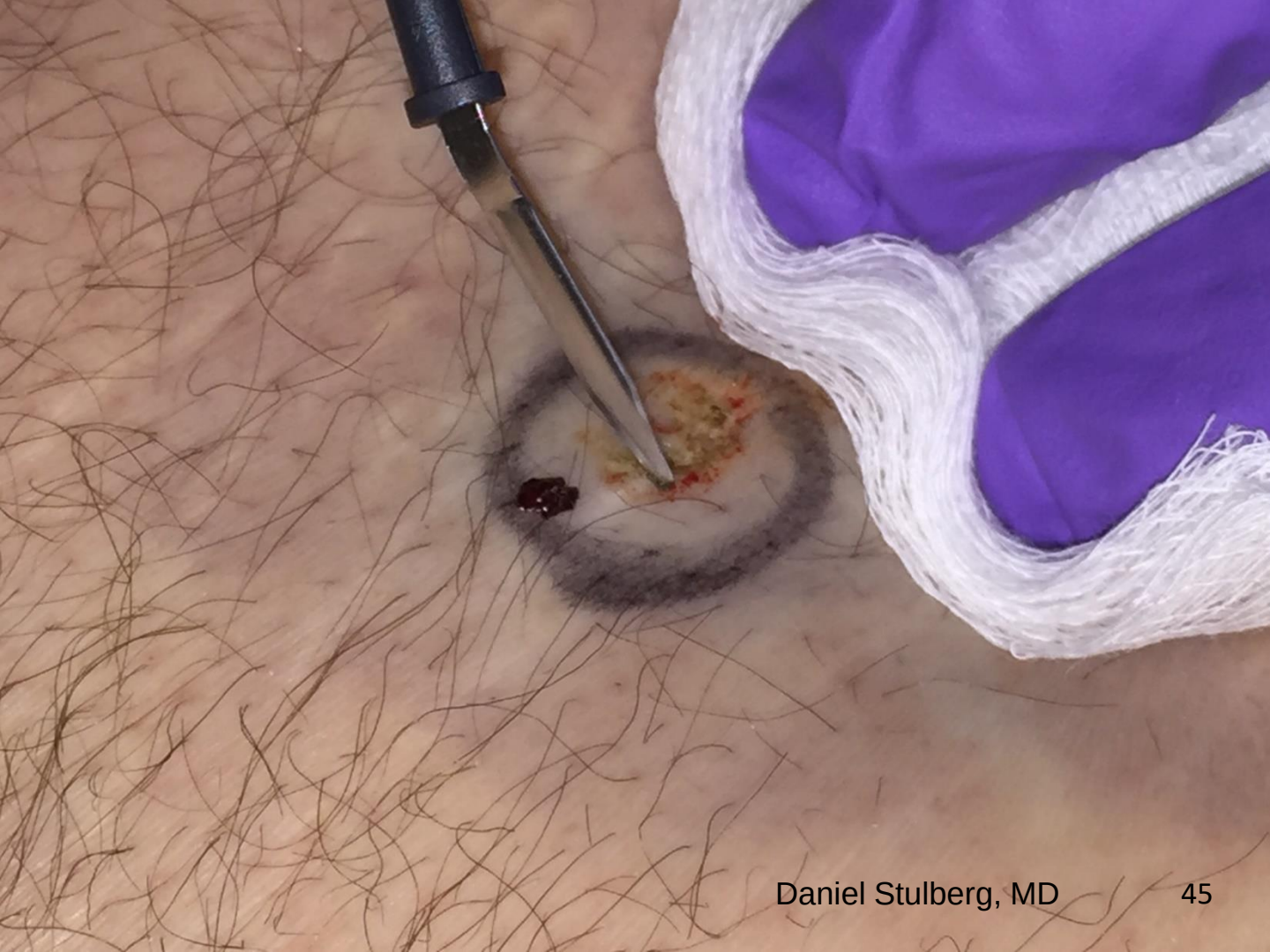

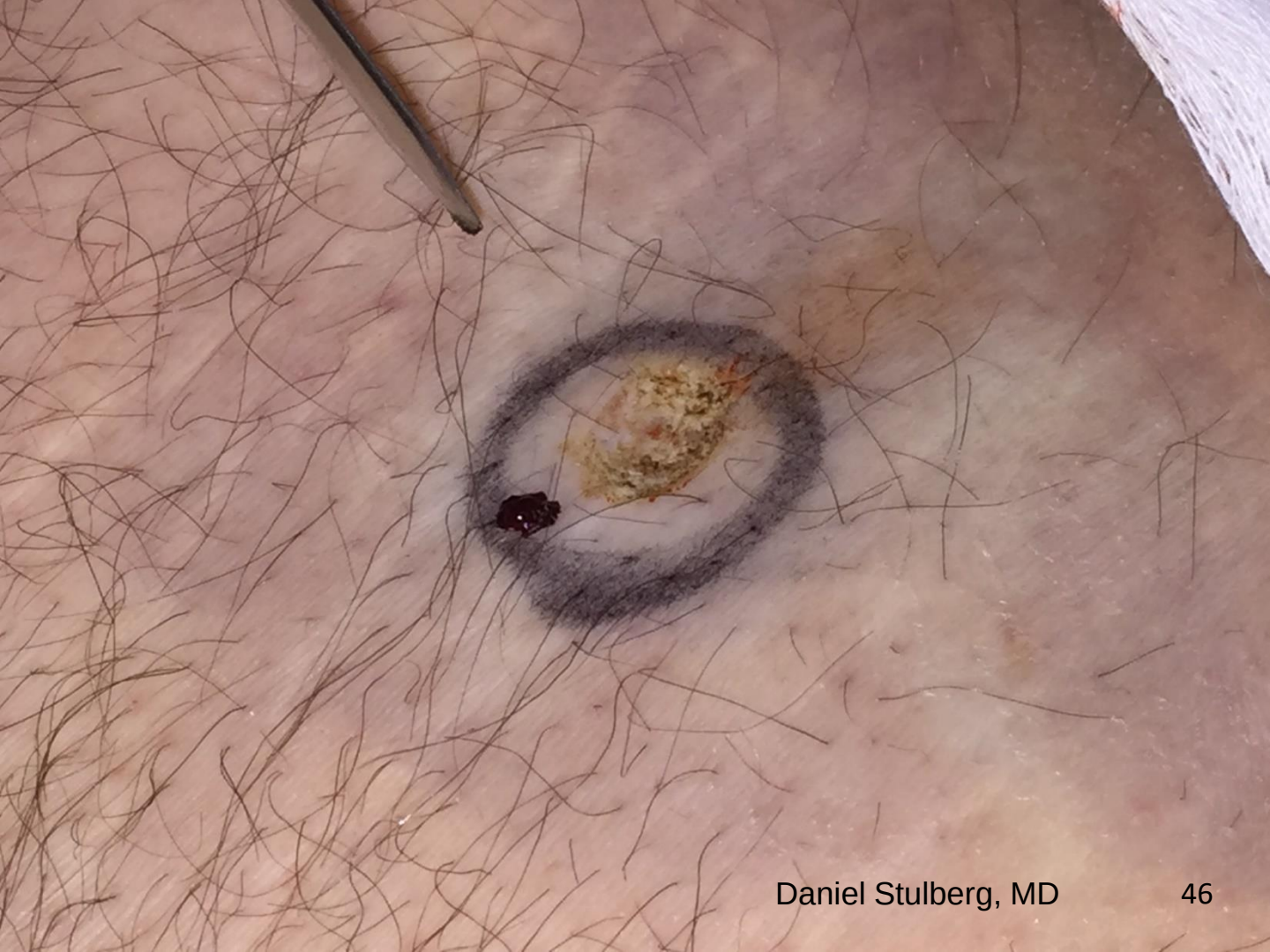

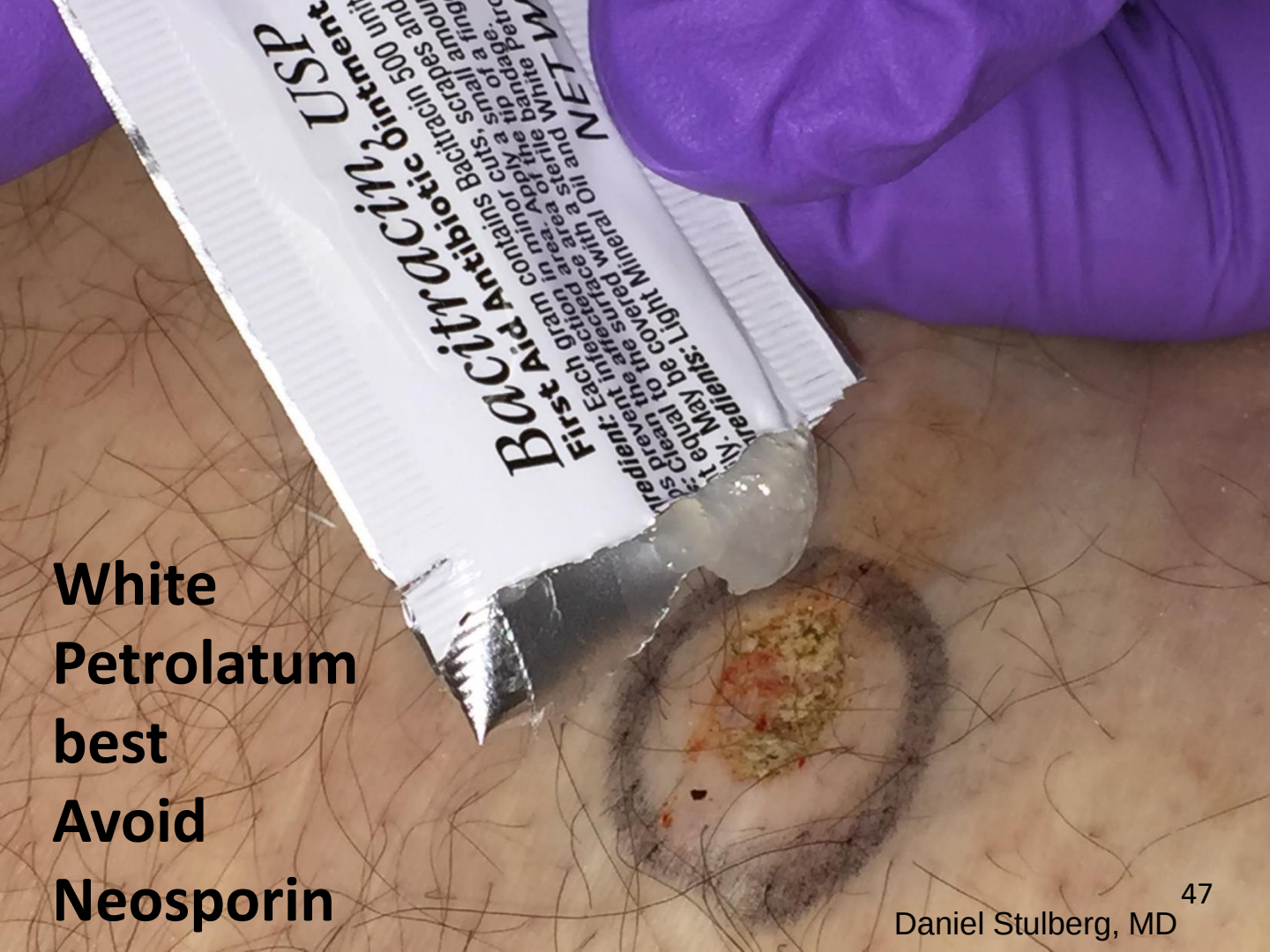

White Petrolatum best
Avoid Neosporin

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Residual pigmented lesion

The National Comprehensive Cancer Network (NCCN) Melanoma Guidelines on the principles of bx of pigmented lesion

- Excisional biopsy (elliptical, punch or saucerization/deep shave) with 1-3 mm margins preferred. Avoid wider margins to permit accurate subsequent lymphatic mapping.
- Full-thickness incisional or punch biopsy of clinically thickest portion of the lesion acceptable in certain anatomic areas (e.g., palm/sole, digit, face and ear) or for very large lesions.
- Superficial shave biopsy may compromise pathologic diagnosis and complete assessment of Breslow thickness, but is acceptable when the index of suspicion is low.
- Coit DG, et al. NCCN Guidelines Version 2.2019 (National Comprehensive Cancer Network)

Courtesy Richard Usatine, MD

Re-excision using Breslow's depth

- Tumor Thickness — Recommended clinical margins
  - In situ — 0.5-1.0 cm
  - ≤1 mm — 1 cm margin
  - >1.0-2 mm depth — 1-2 cm
  - >2.0mm — 2cm
  - Margins may be modified to accommodate individual anatomic or functional considerations.
  - Consider sentinel node dissection if
    - > 0.8mm
    - Or ulceration

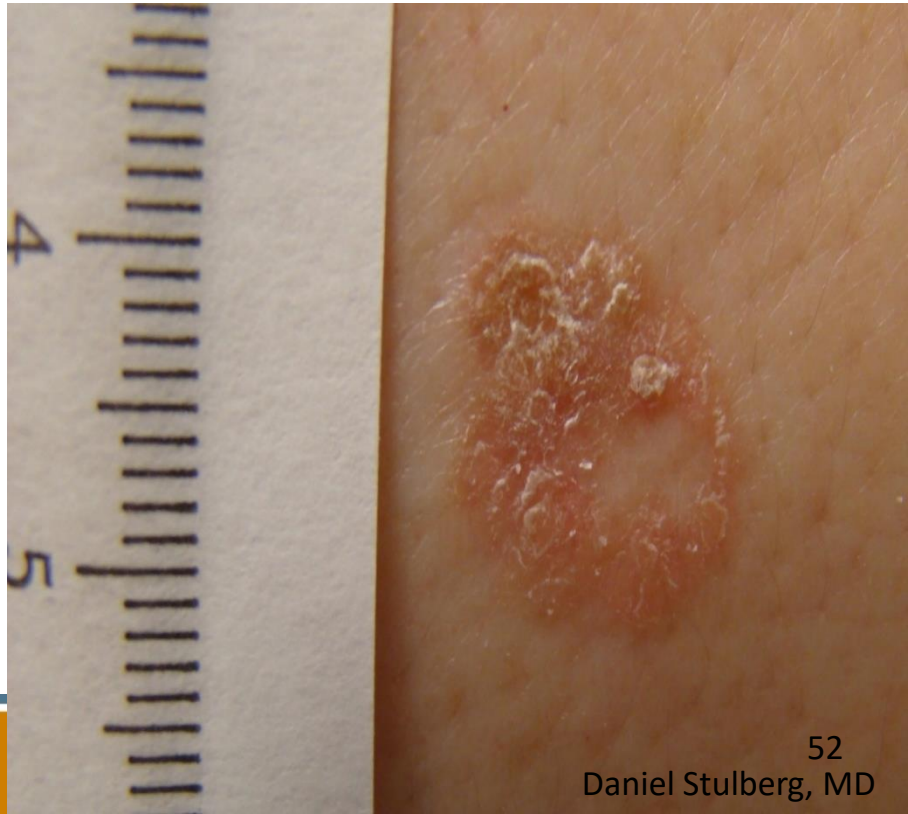
Coit DG, et al. NCCN Melanoma Panel. Melanoma. J Natl Compr Canc Netw 2019;17(4):367–402.

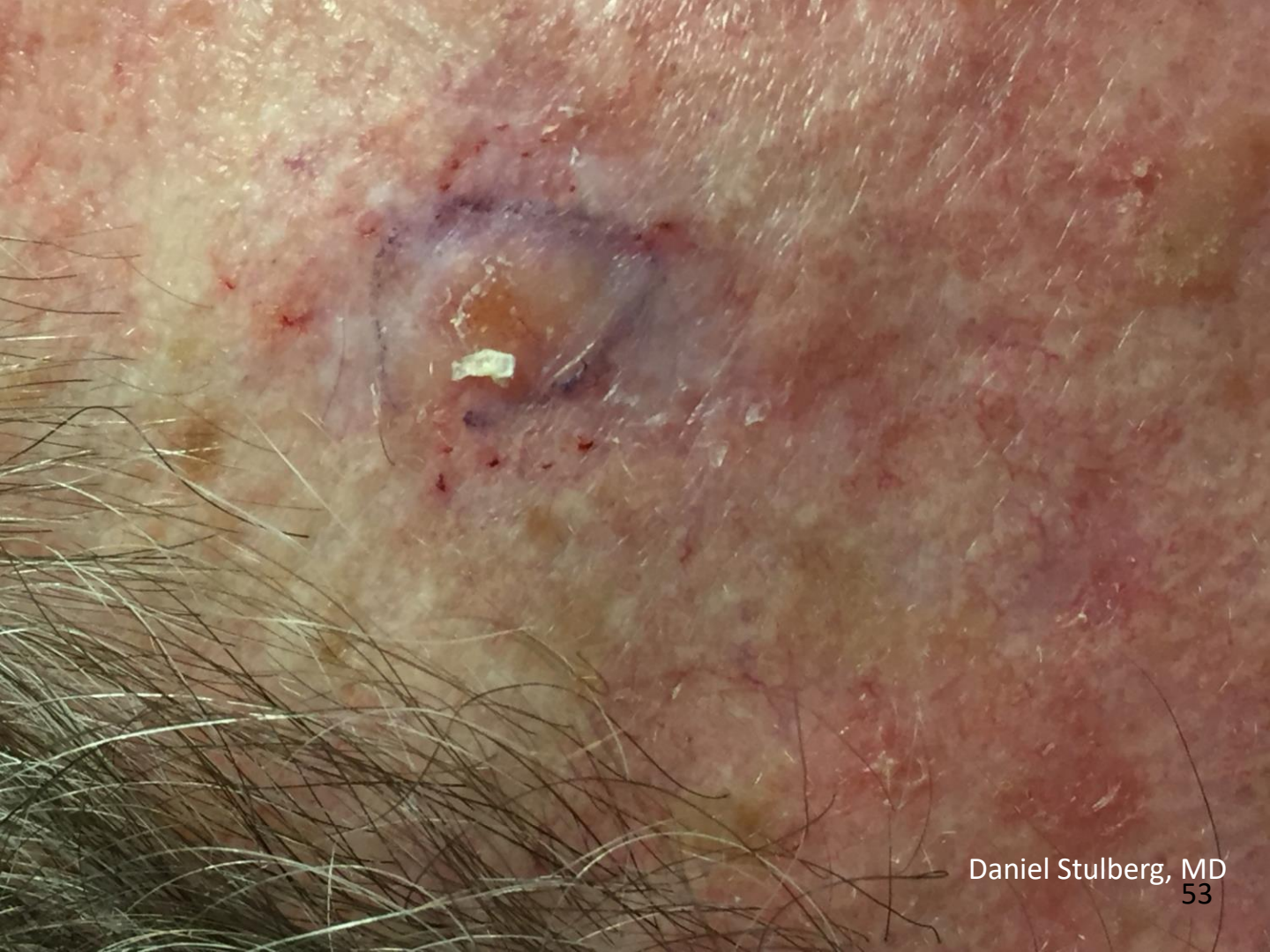
Practice

- Draw circles on pig's foot
- Flex blade
- Excise on circle to ~1 mm depth

EDC - Electrodessication and curettage

- BCC
- Bowen's - Superficial SCC





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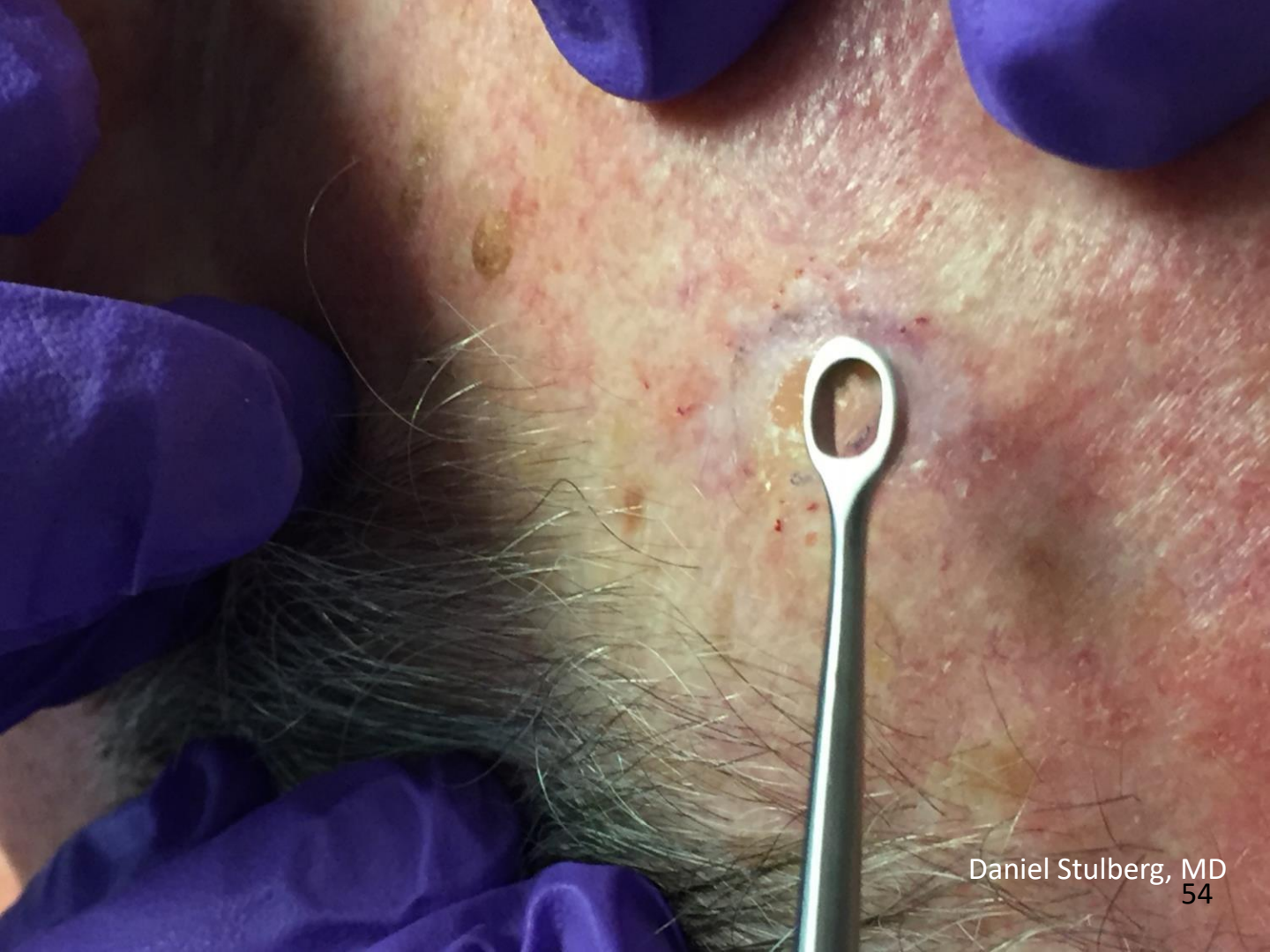

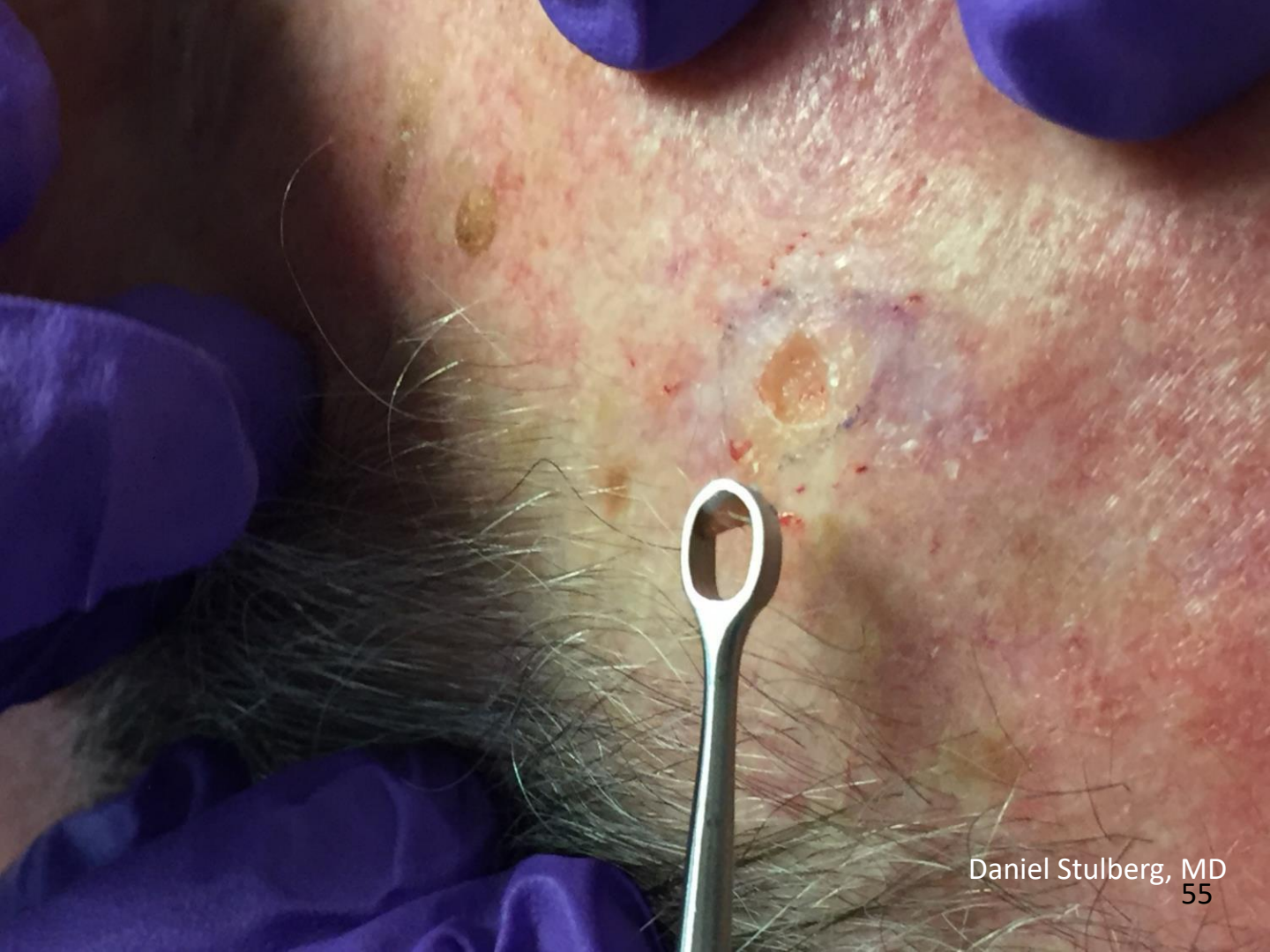

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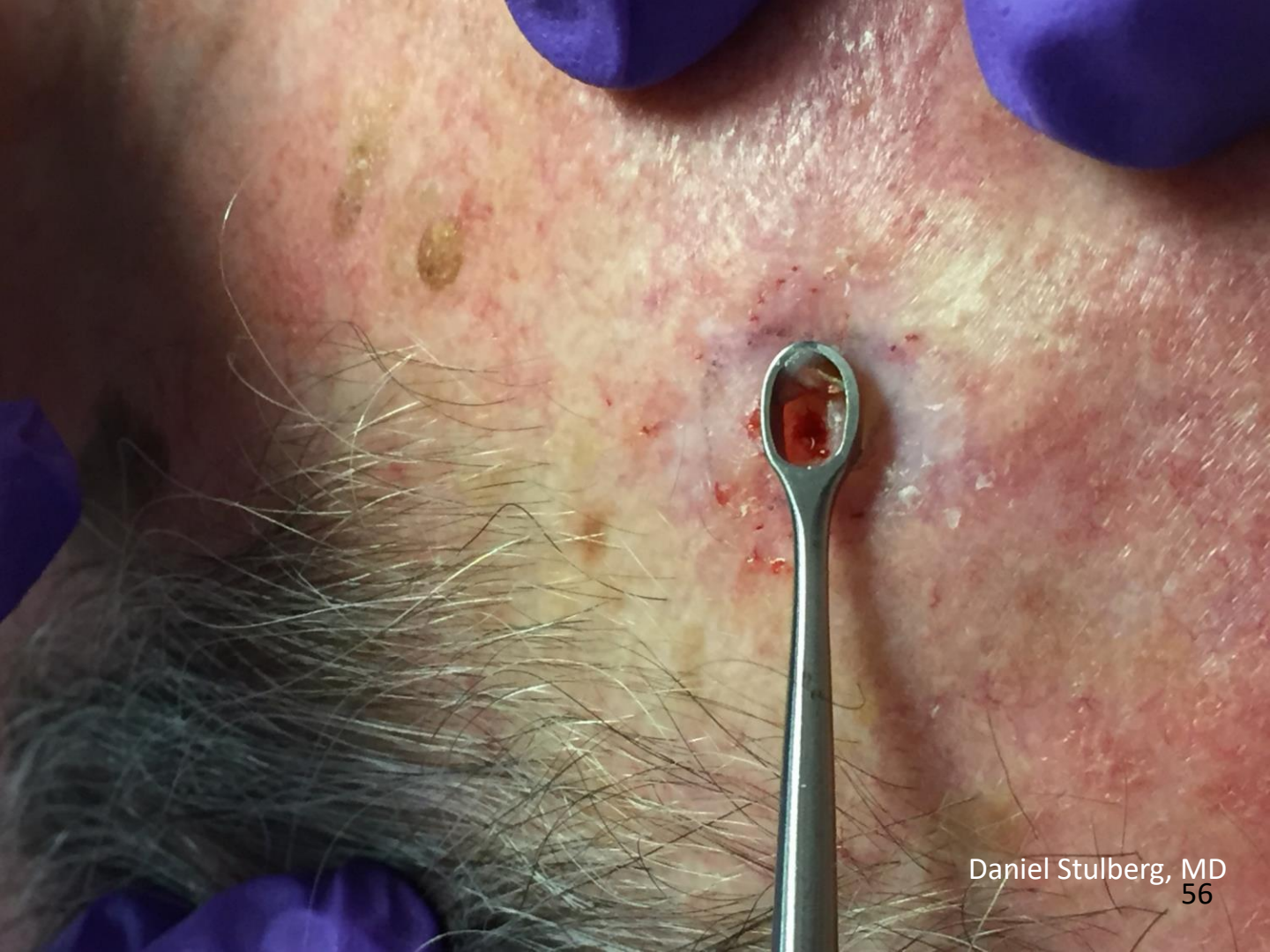
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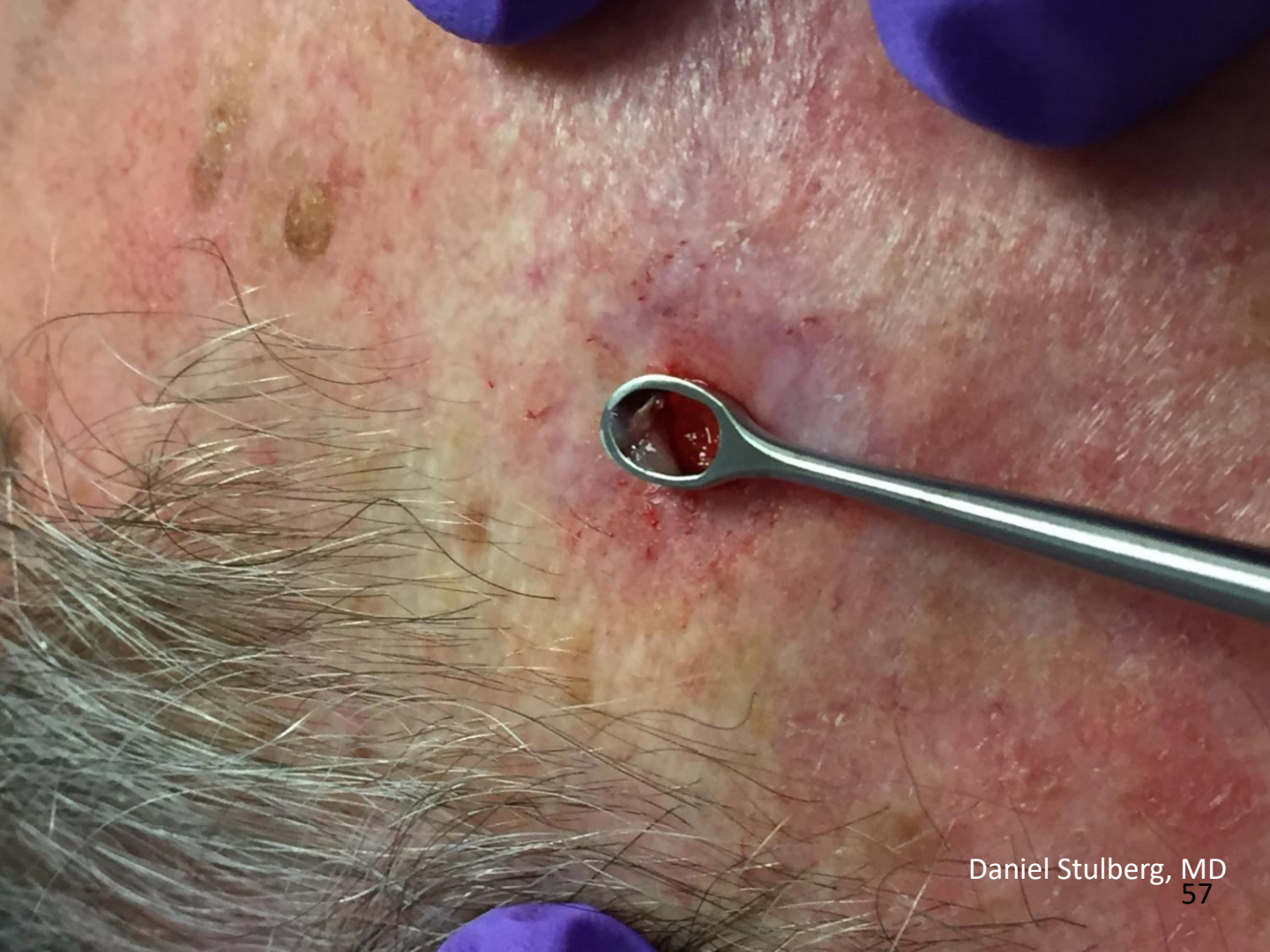

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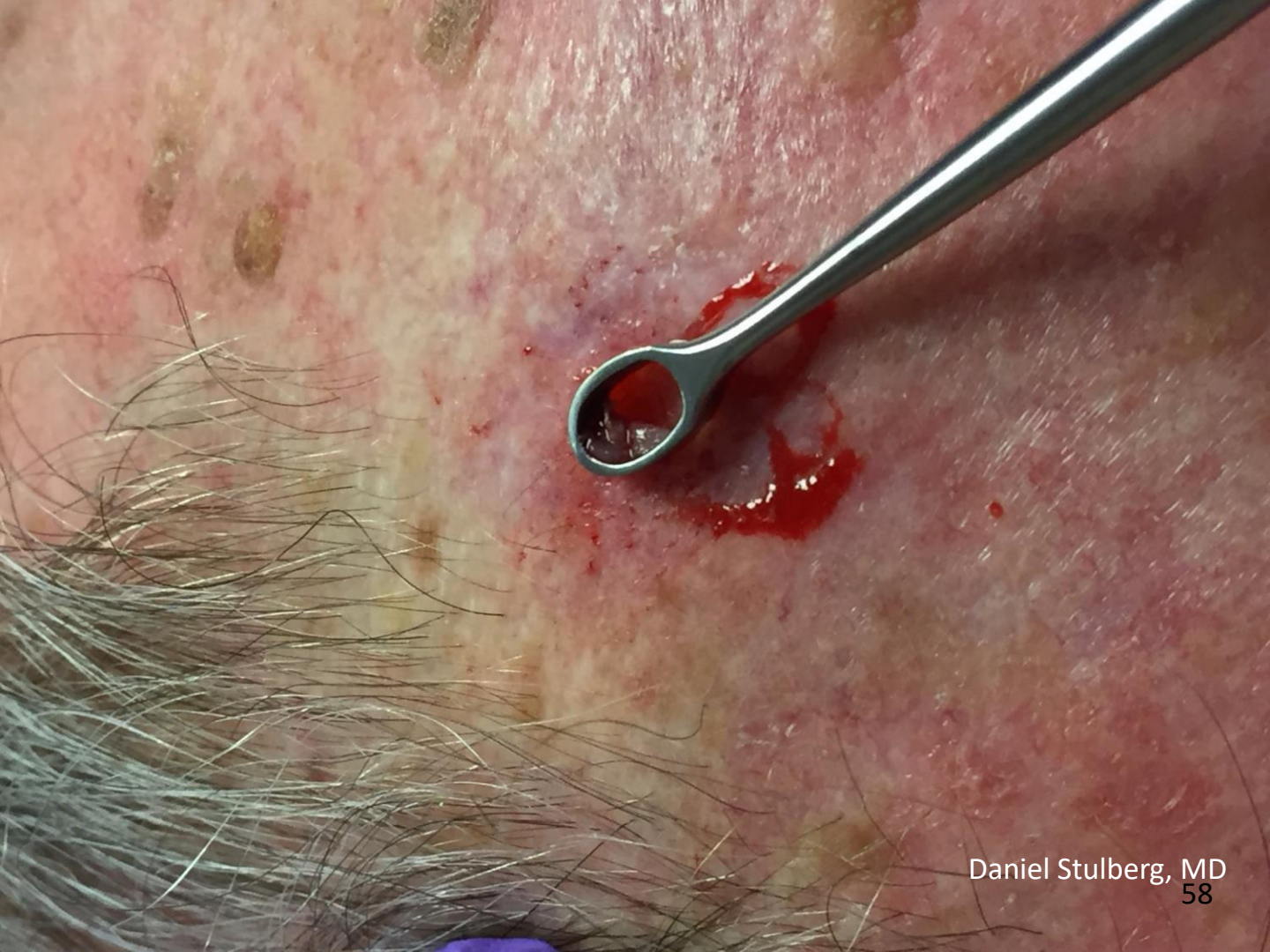

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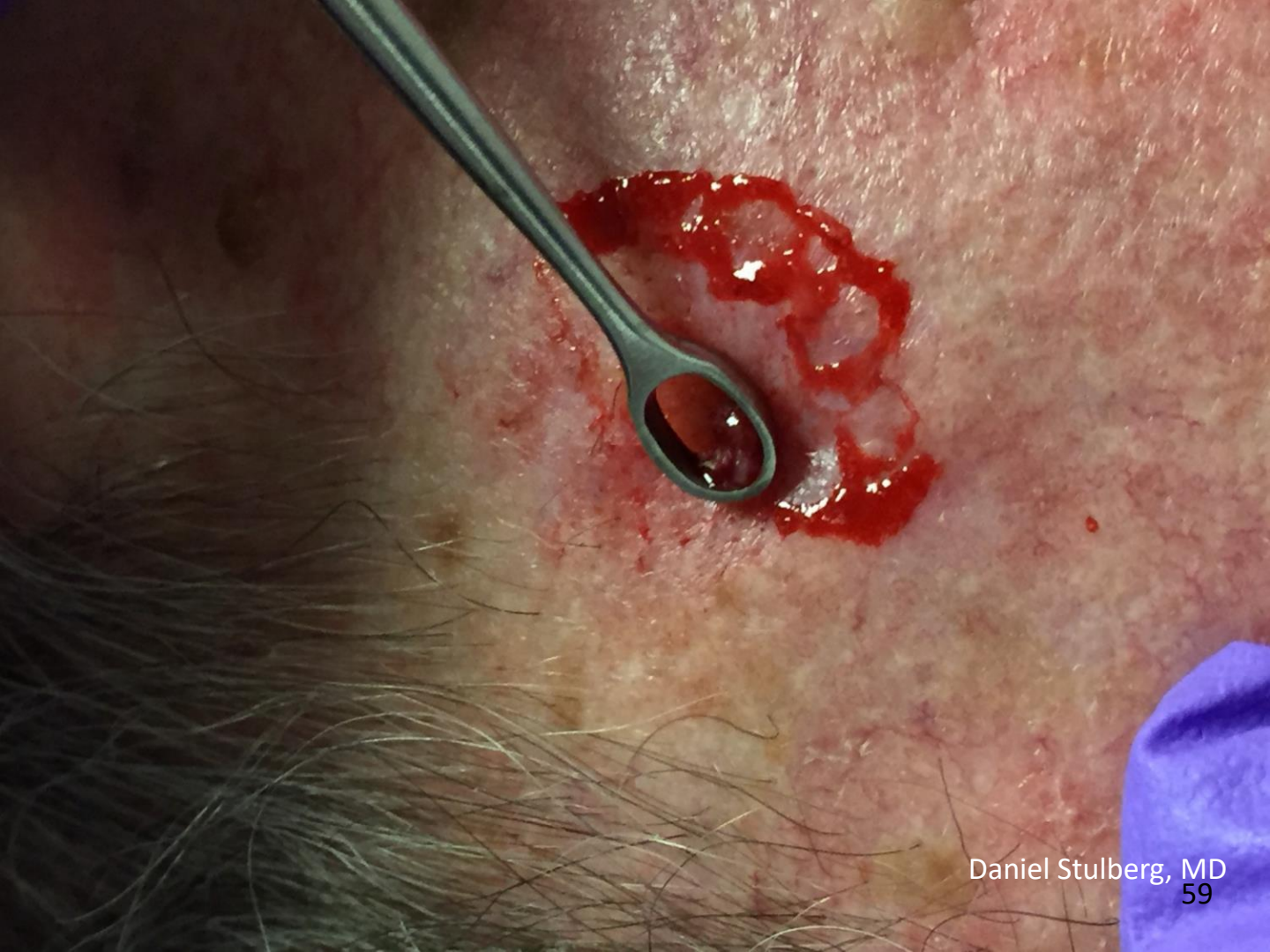

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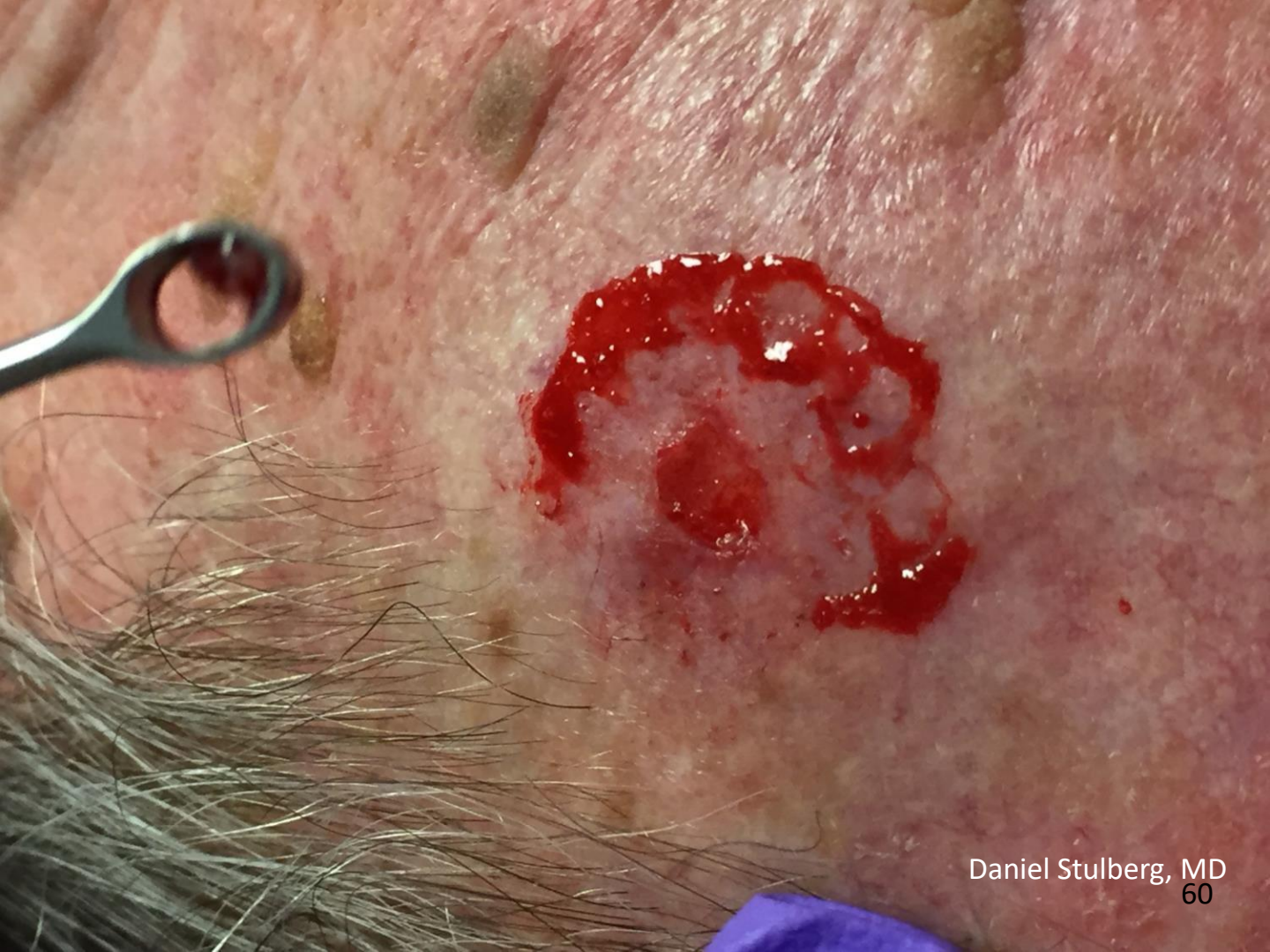
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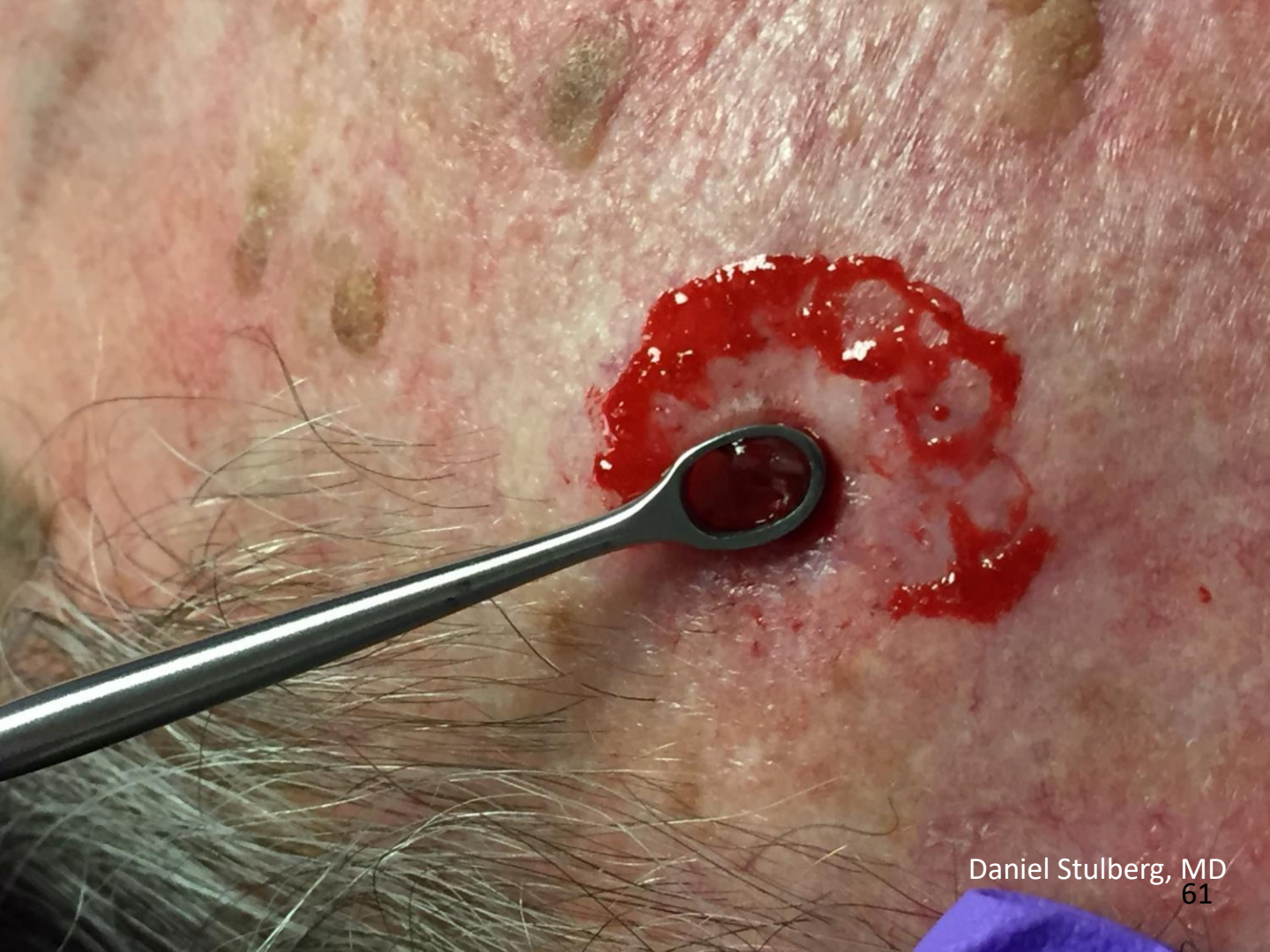
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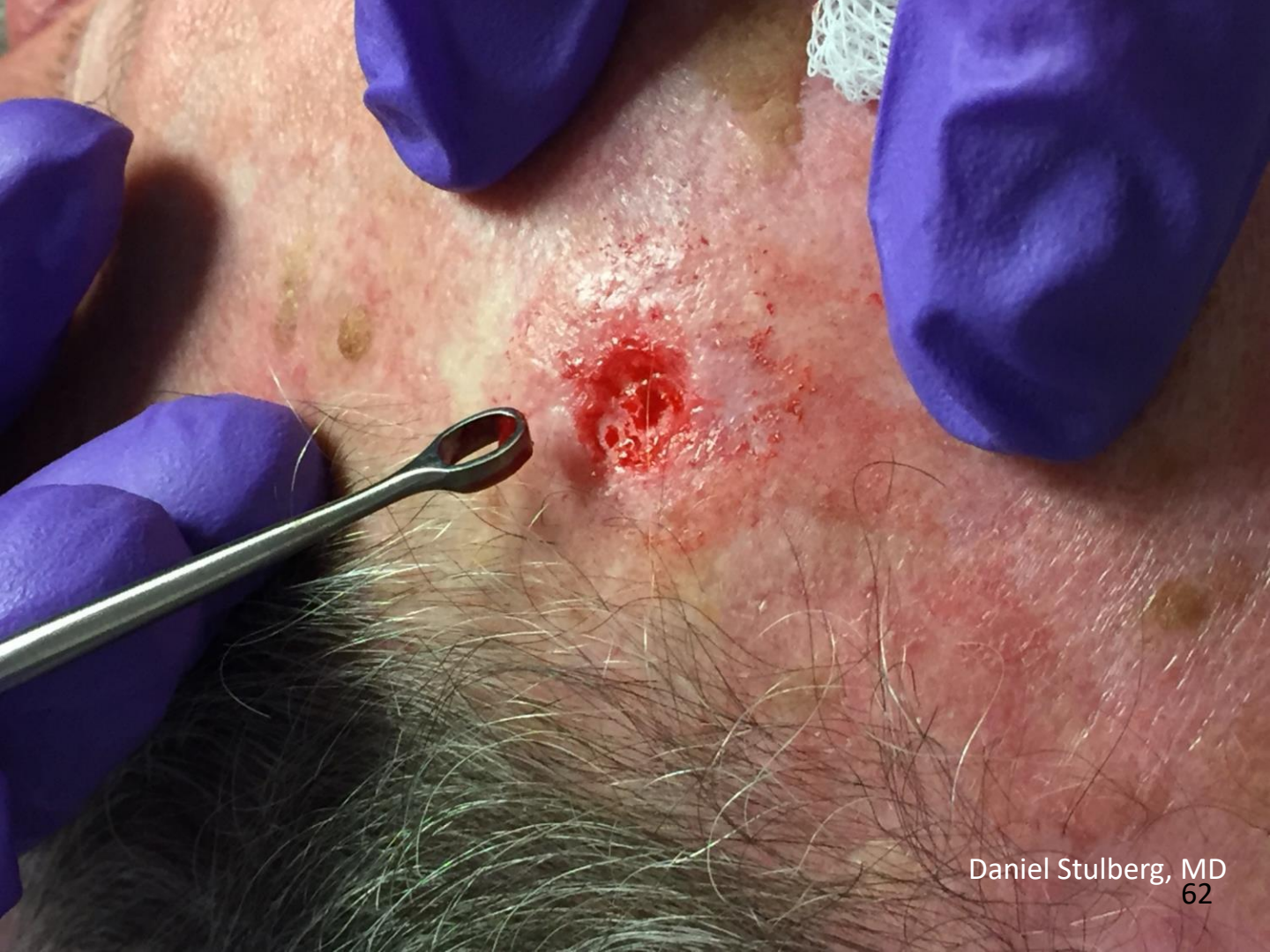

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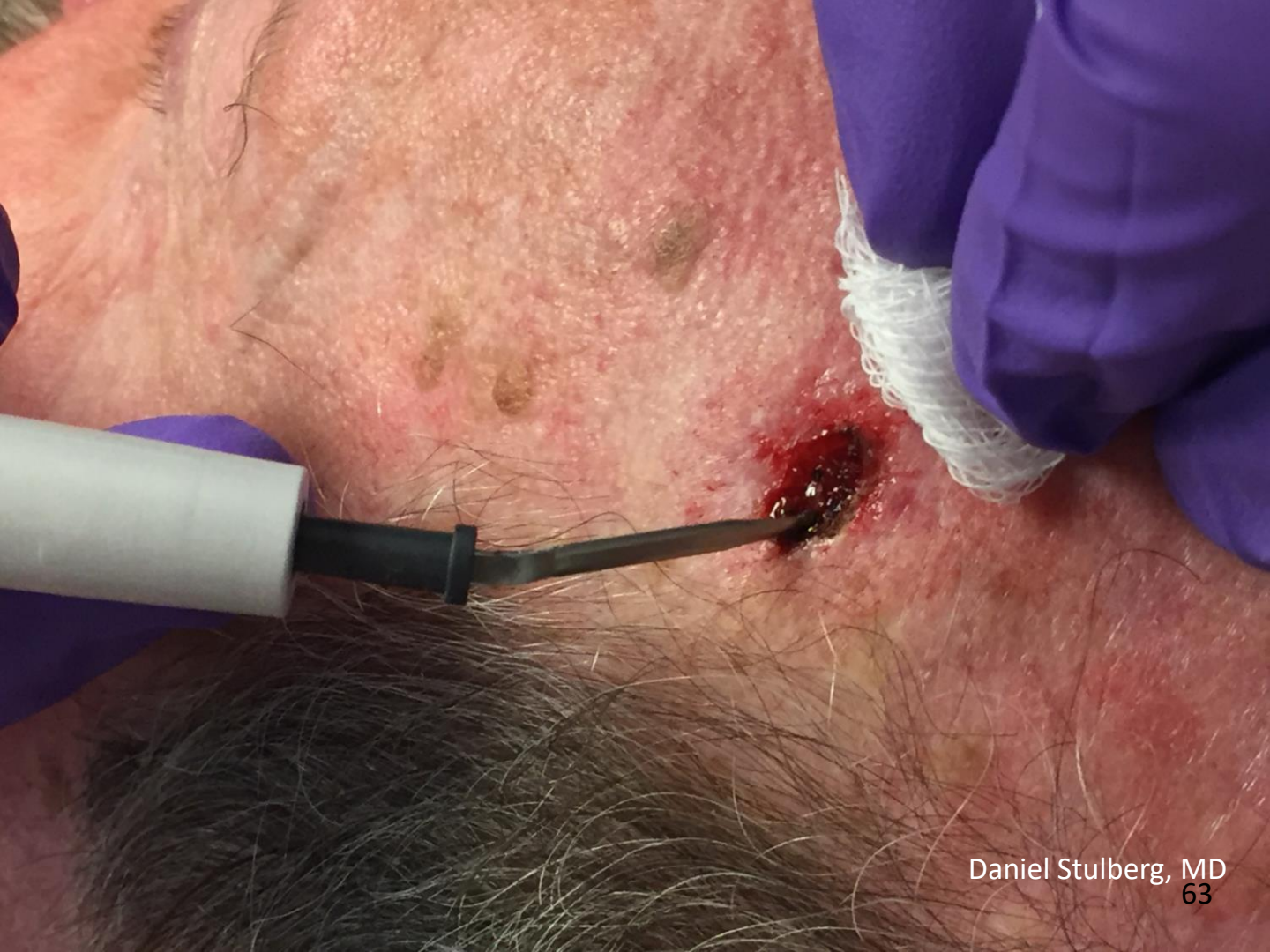

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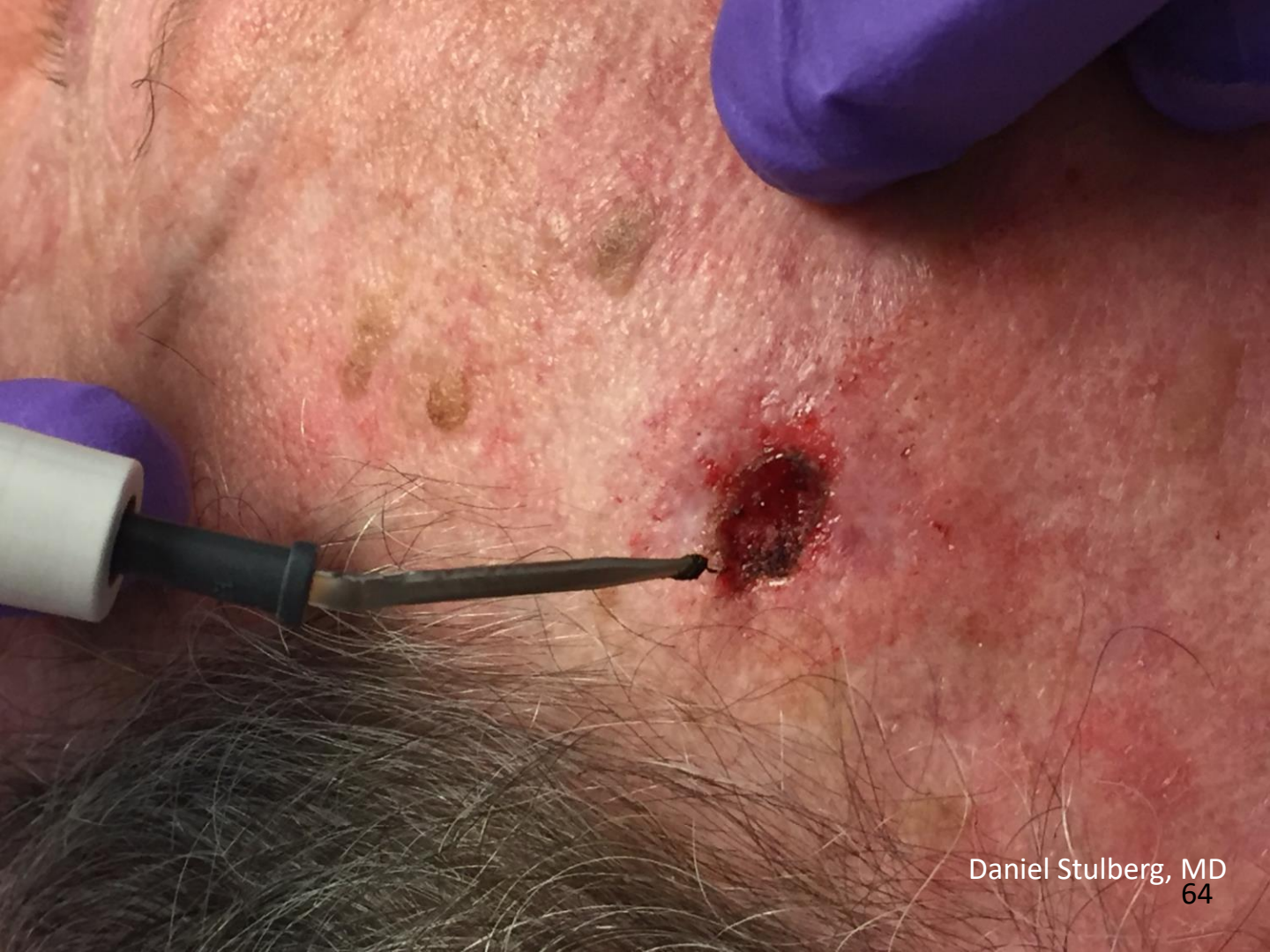

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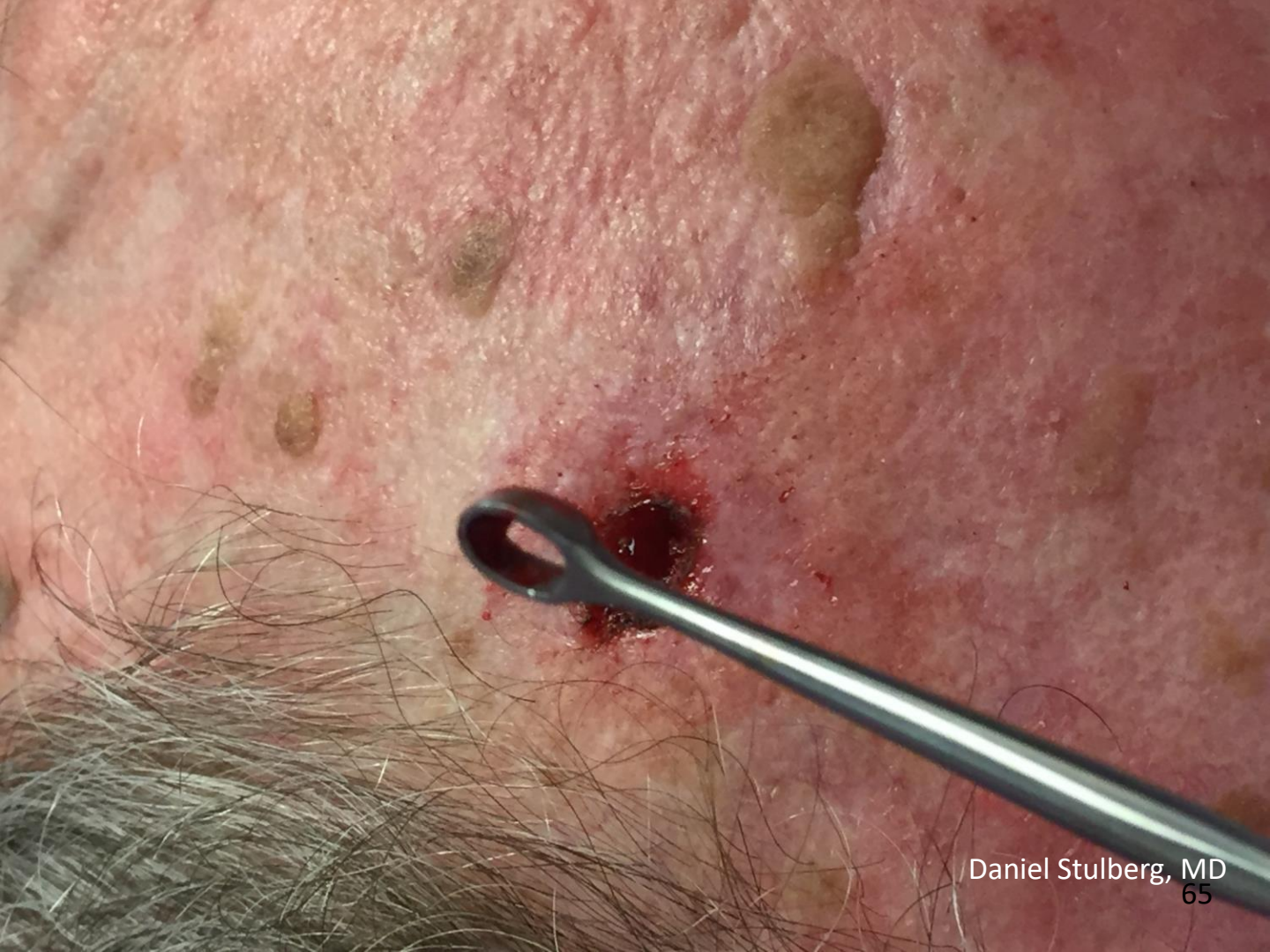
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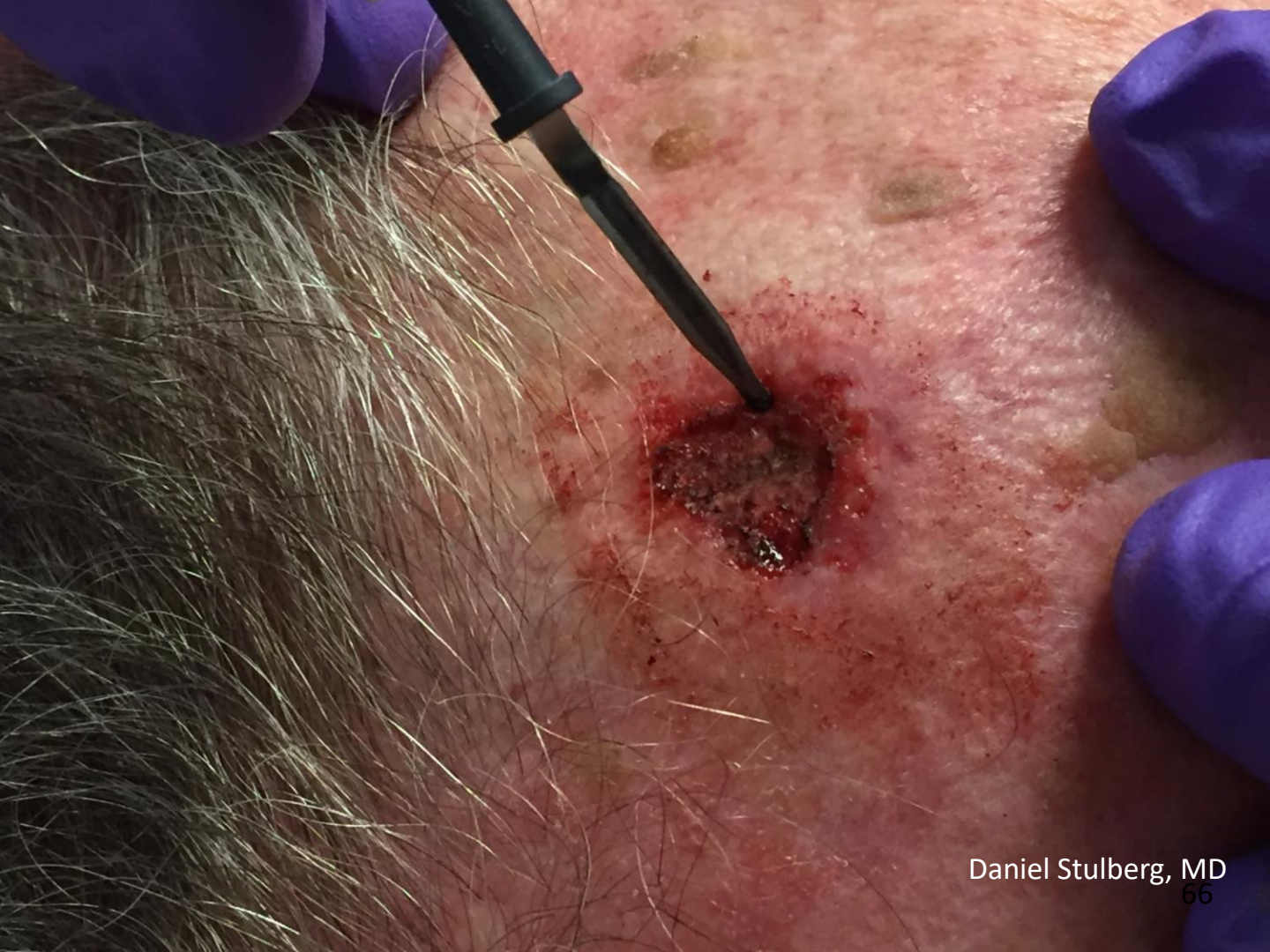

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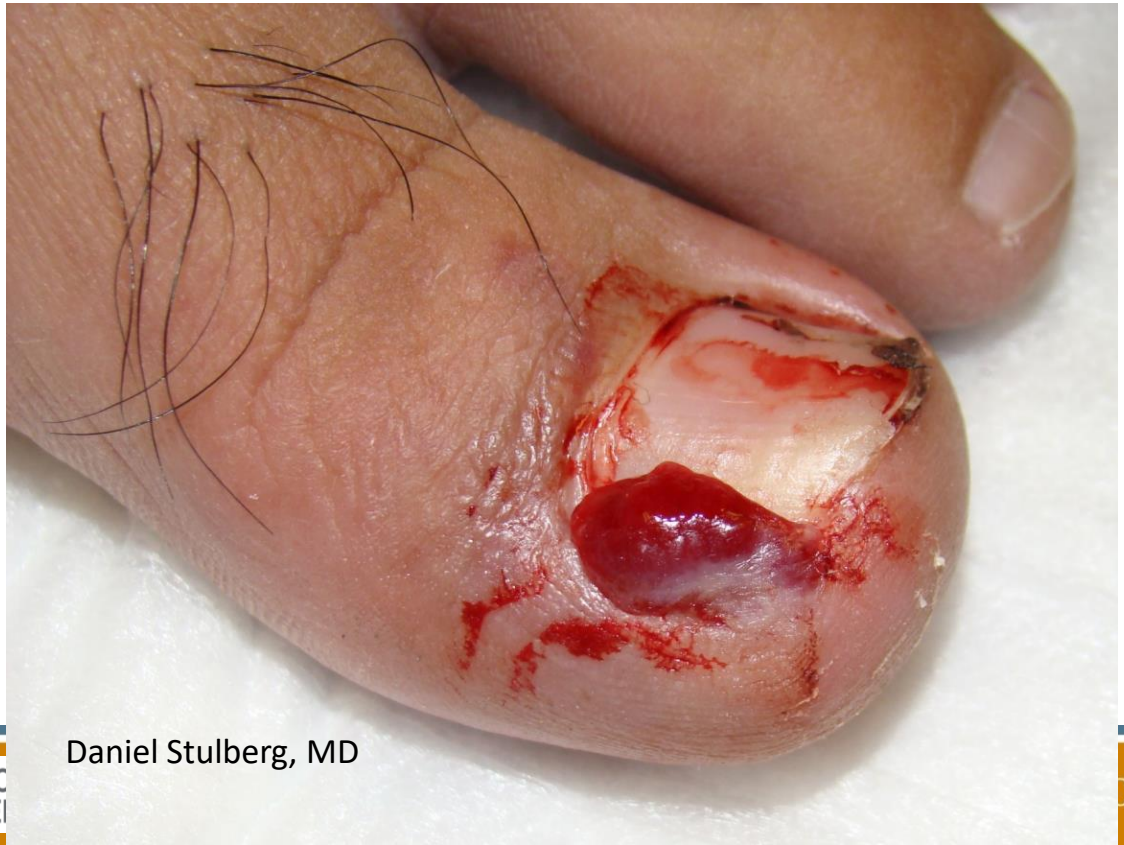
Practice

- Lightly cauterize the base of your shave BX / Excisions
- Then turn up electrocautery power
- Burn 1 cm at shave site
- Scrape with curette till gritty feel
- Use arm movement not just fingers
- Cauterize
- Repeat

Diagnosis? & opportunity for curettage and cautery



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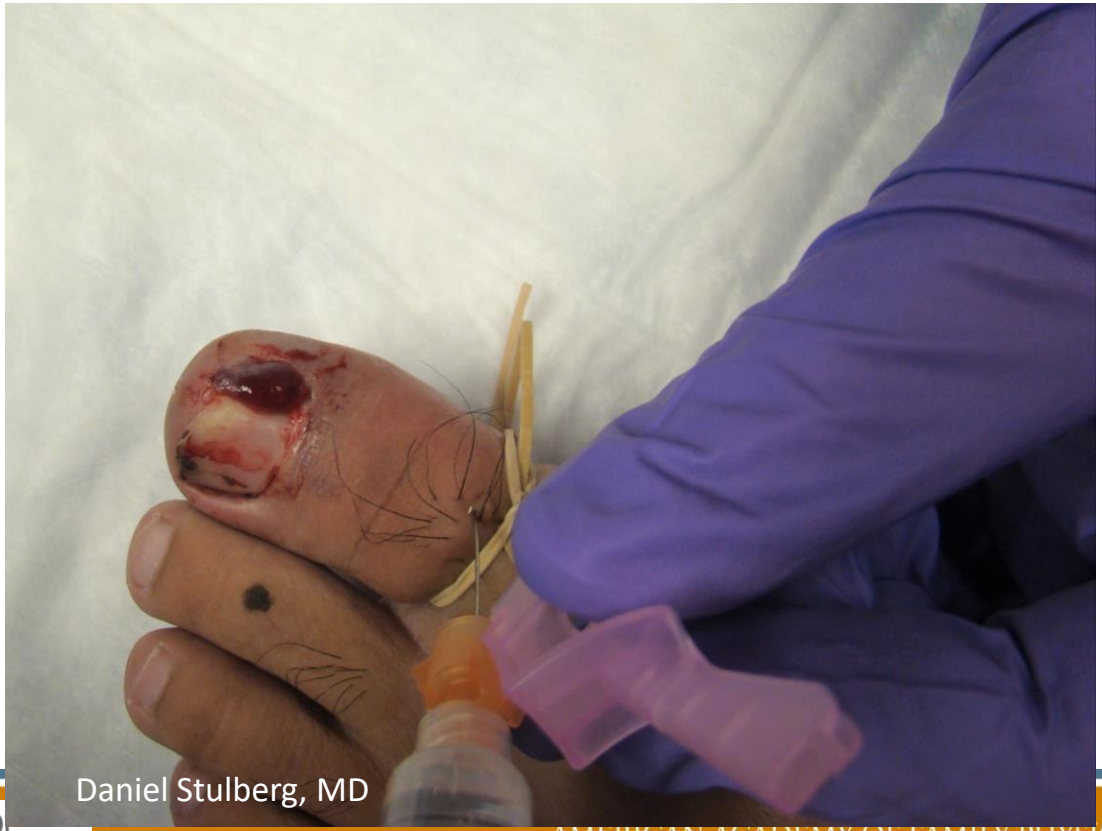
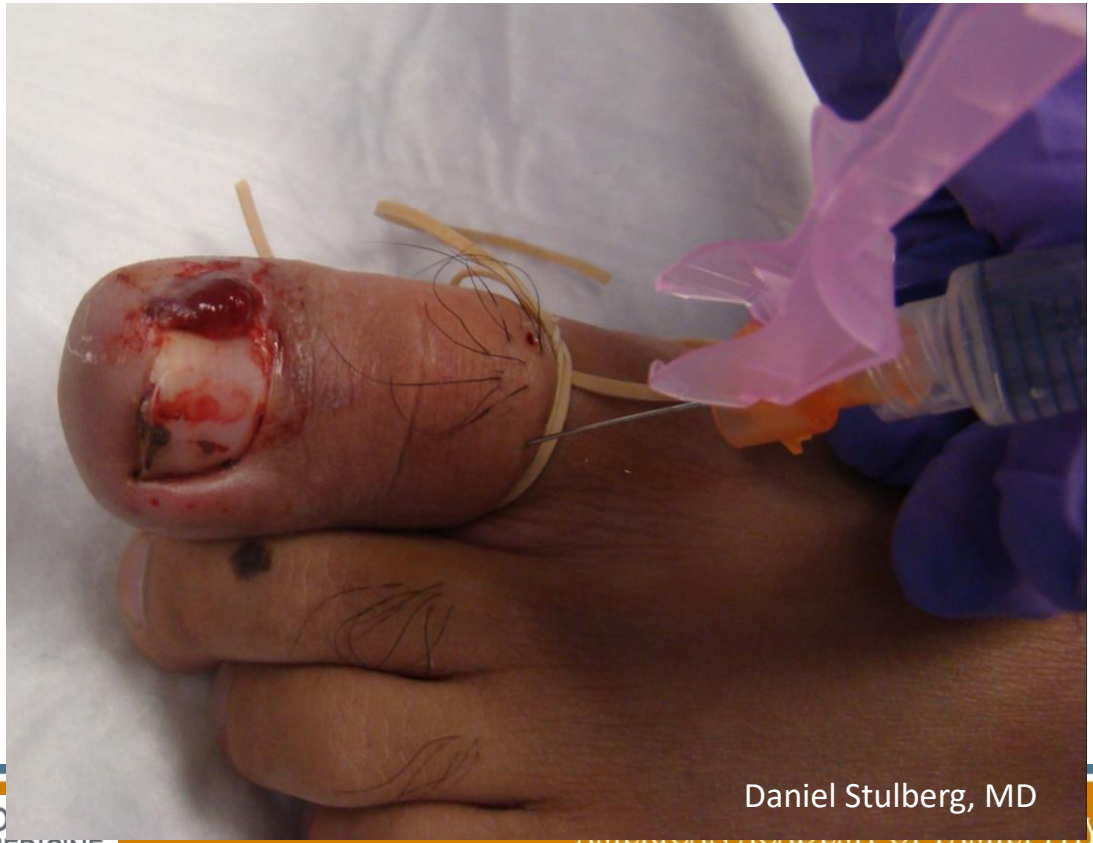
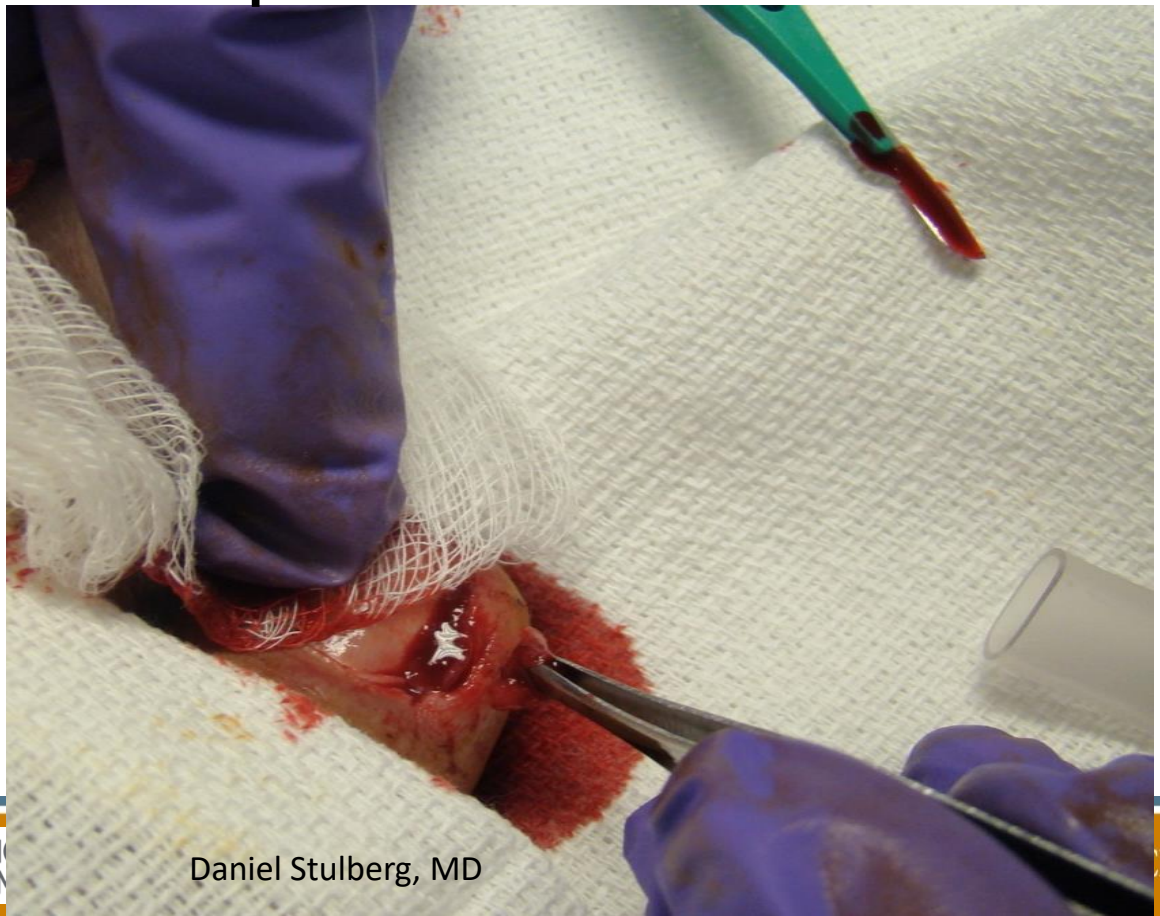
Digital block - 1% lidocaine plain



2-4 ml total via 2 injections



Sharp dissection/removal



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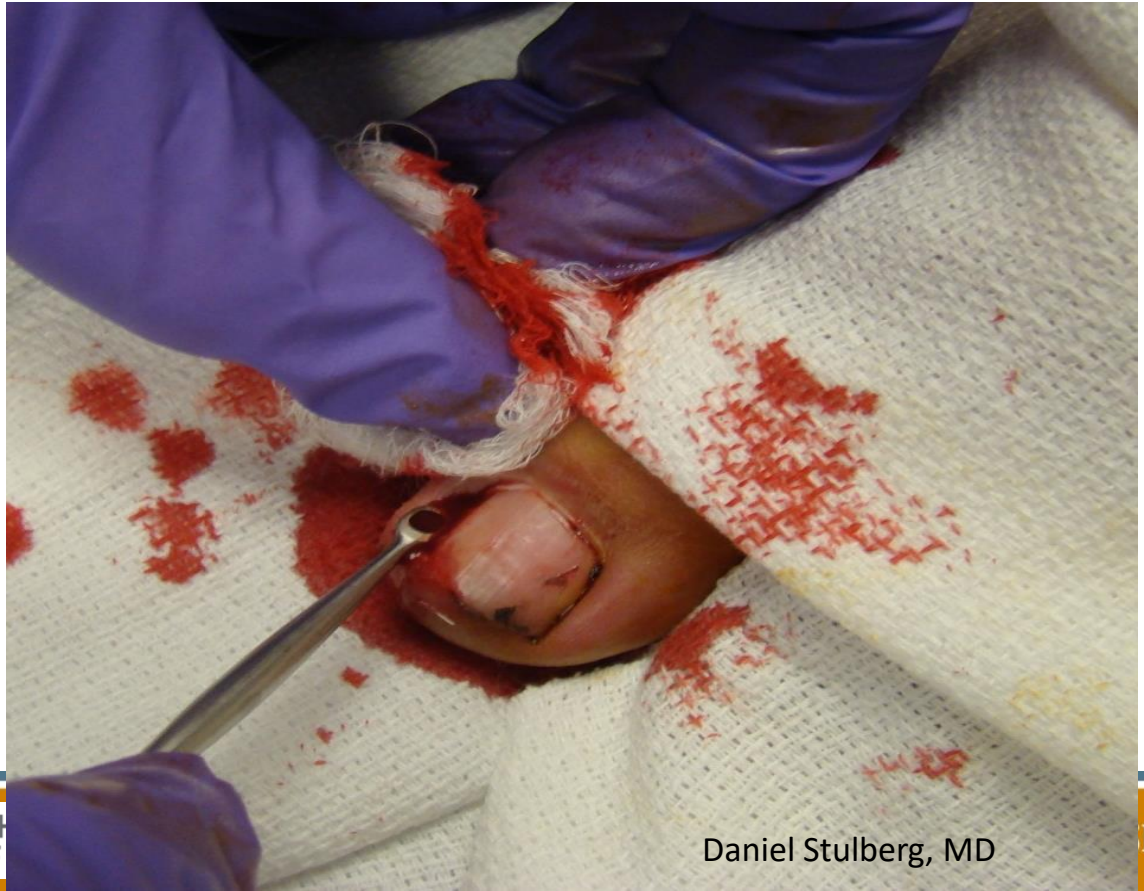
Curettage of base



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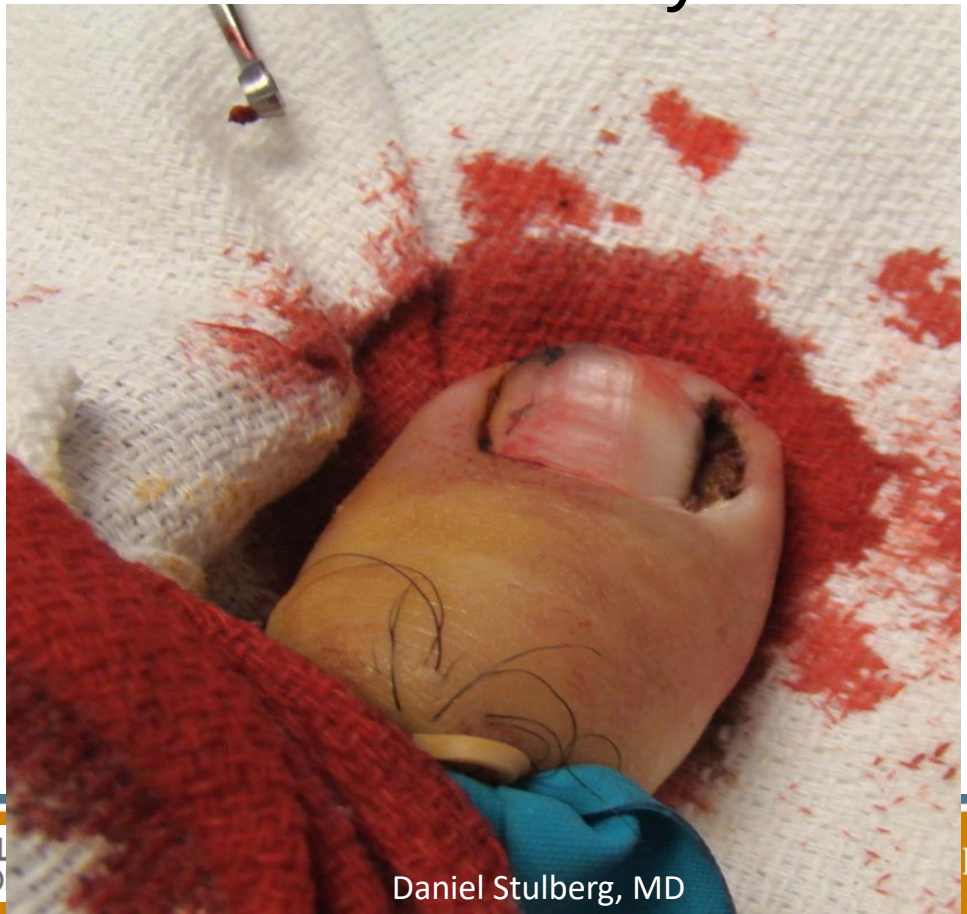
Electrocautery of base



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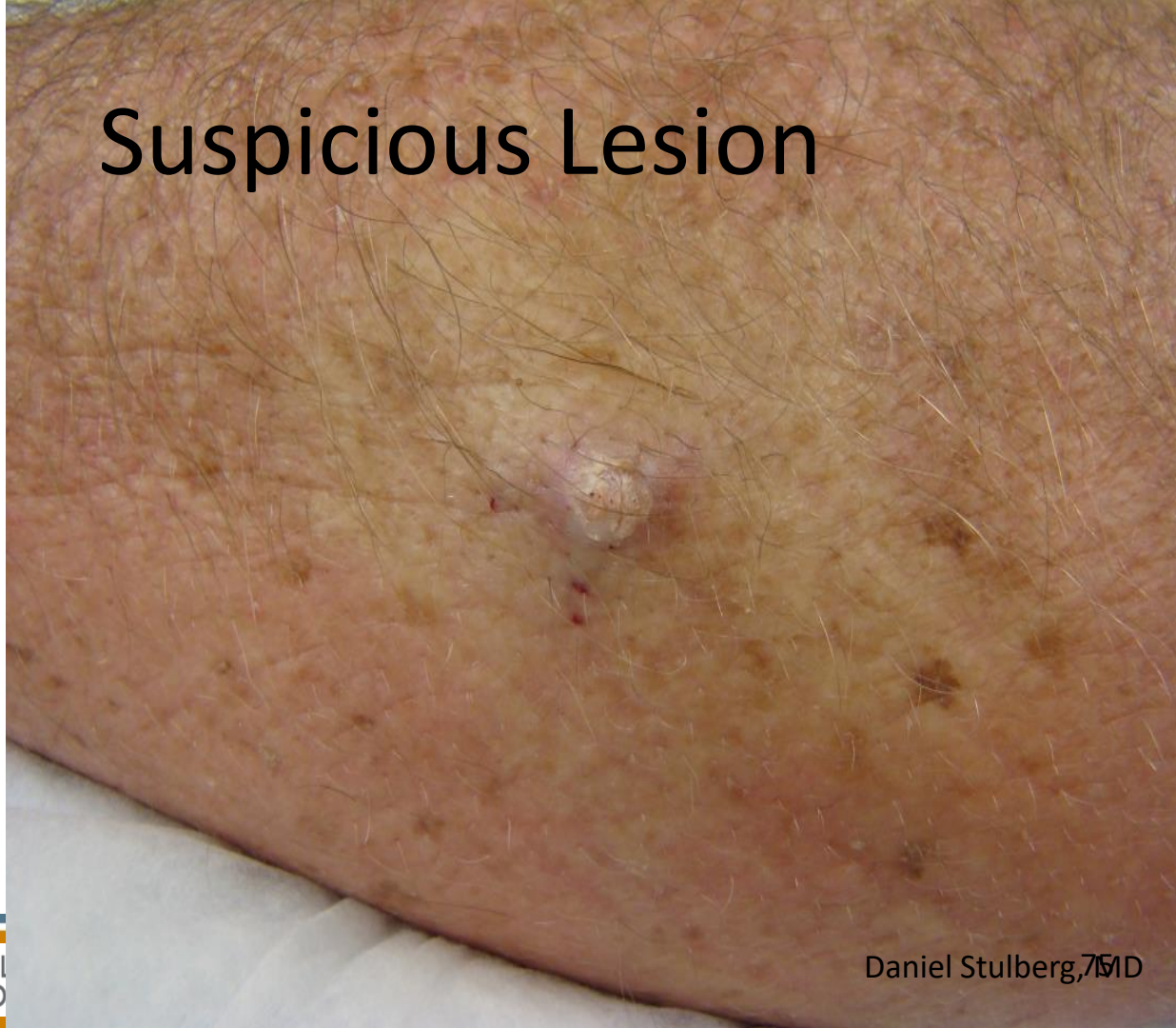
Suspicious Lesion



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Radiofrequency cutting

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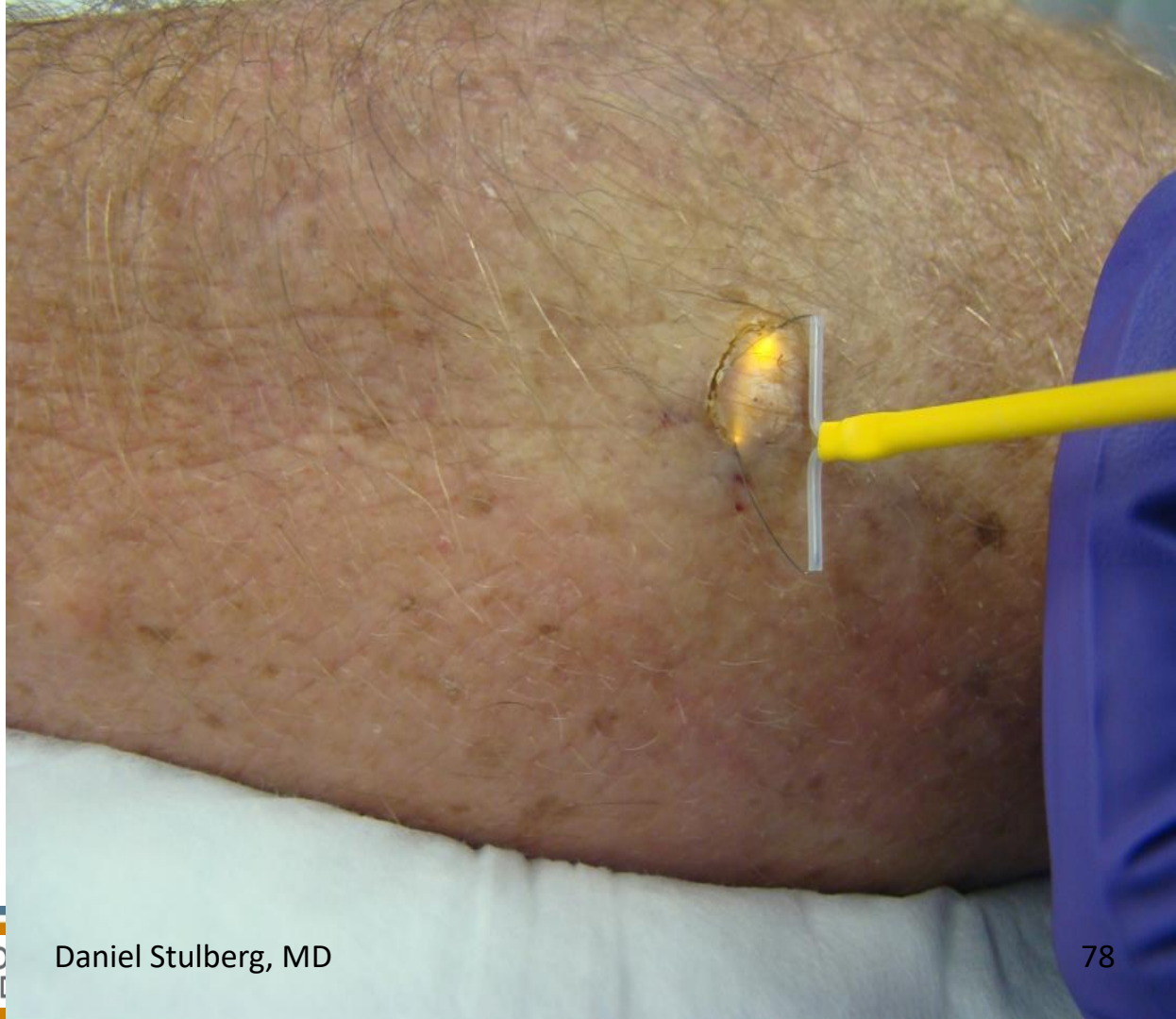
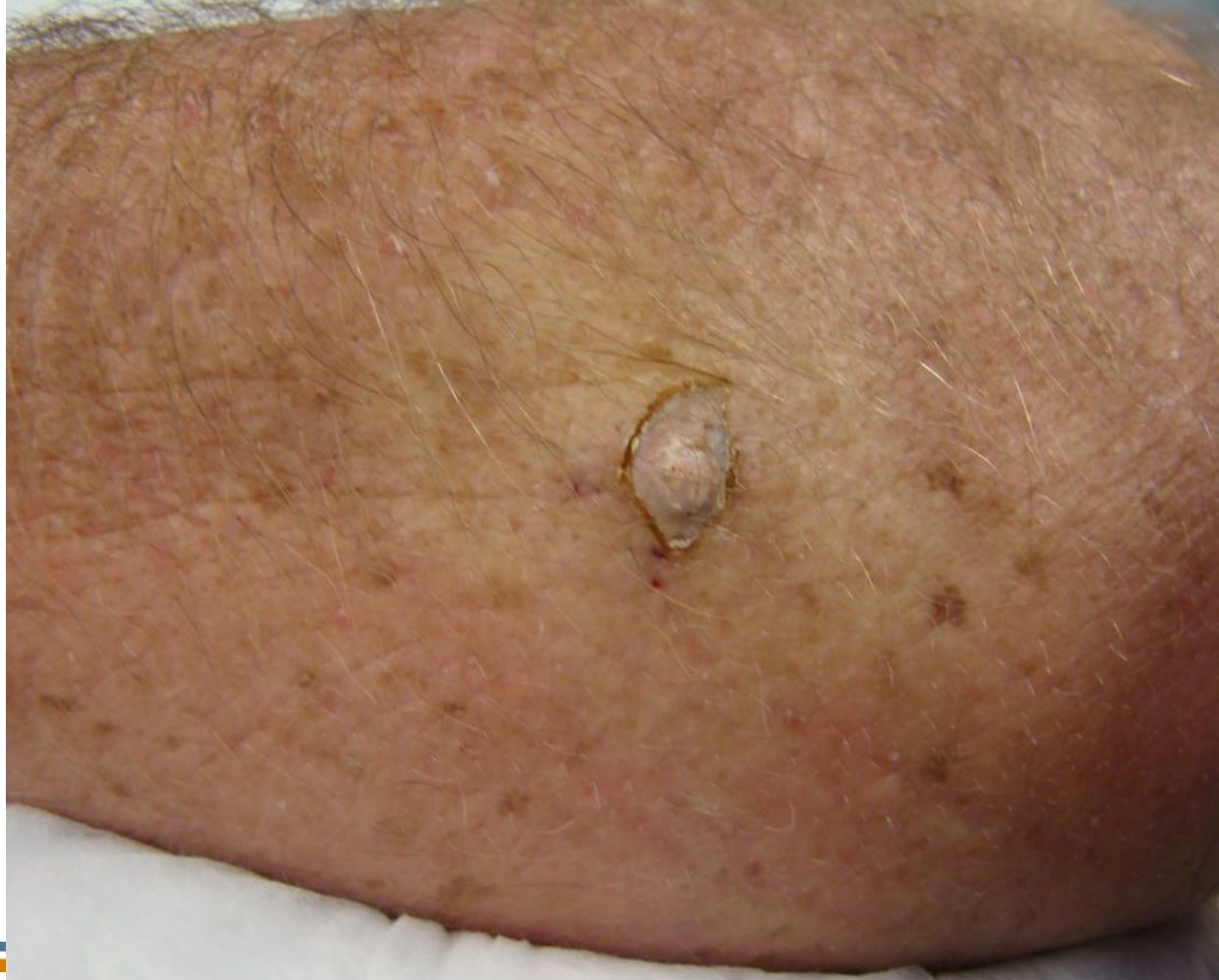
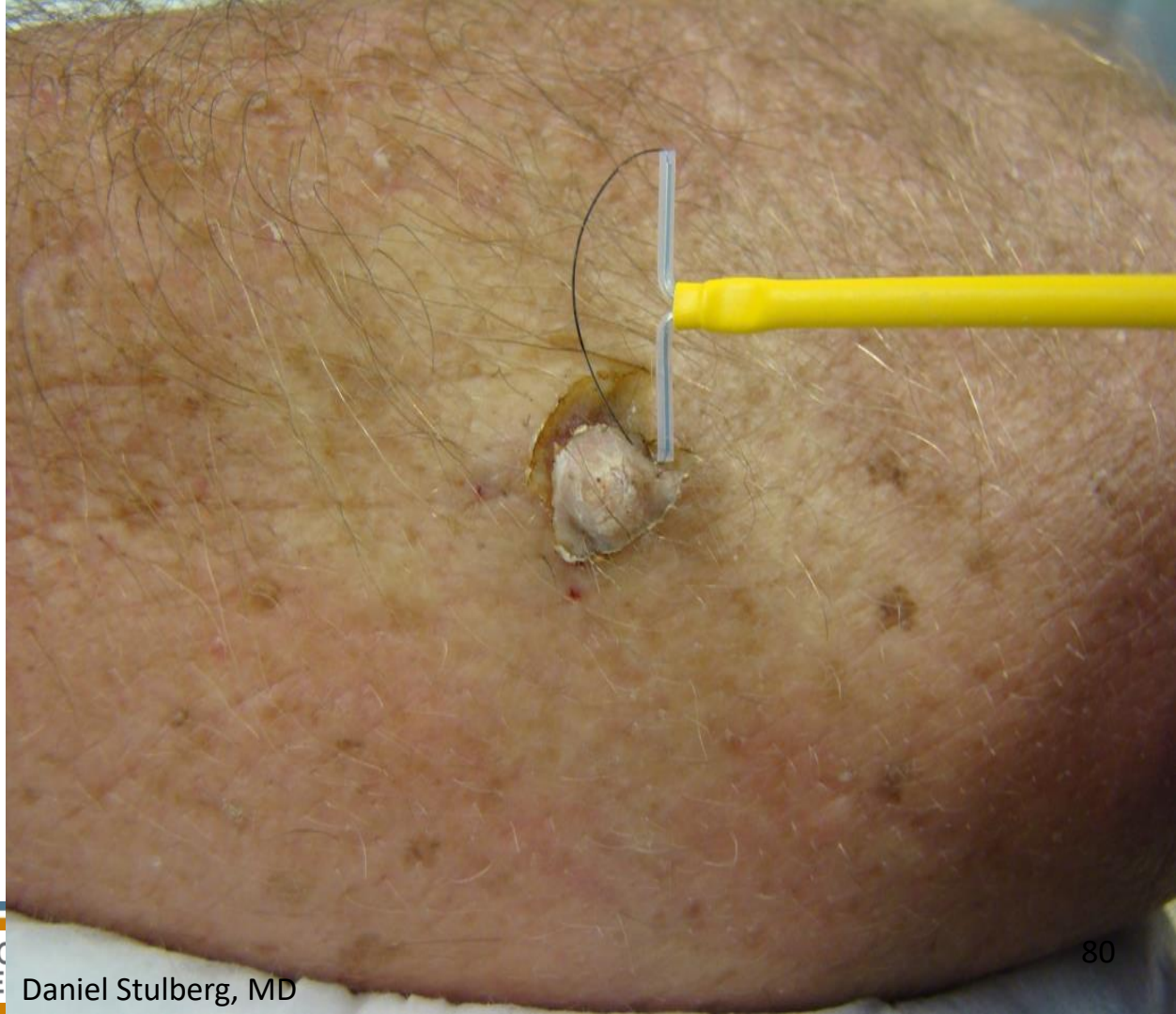
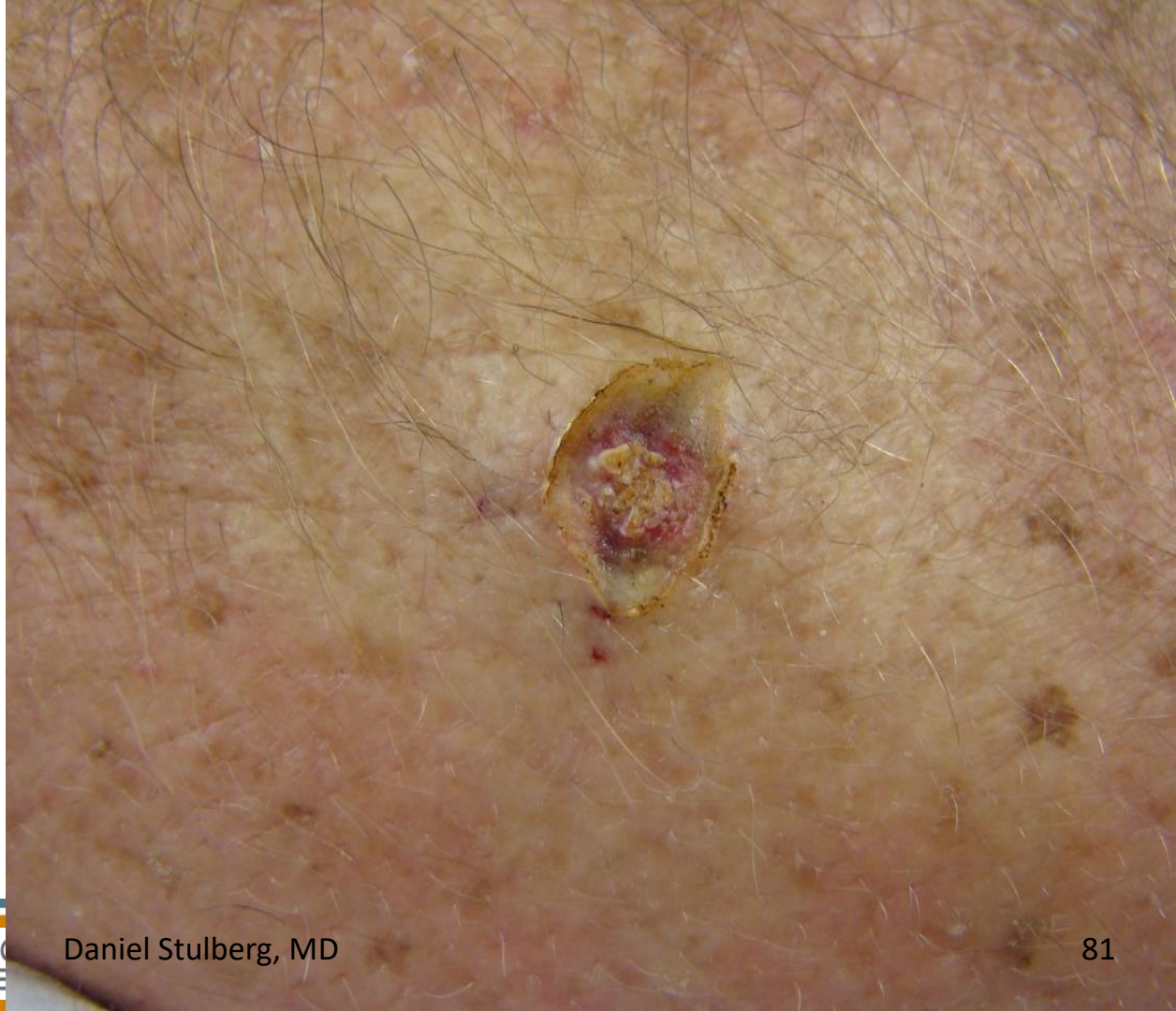
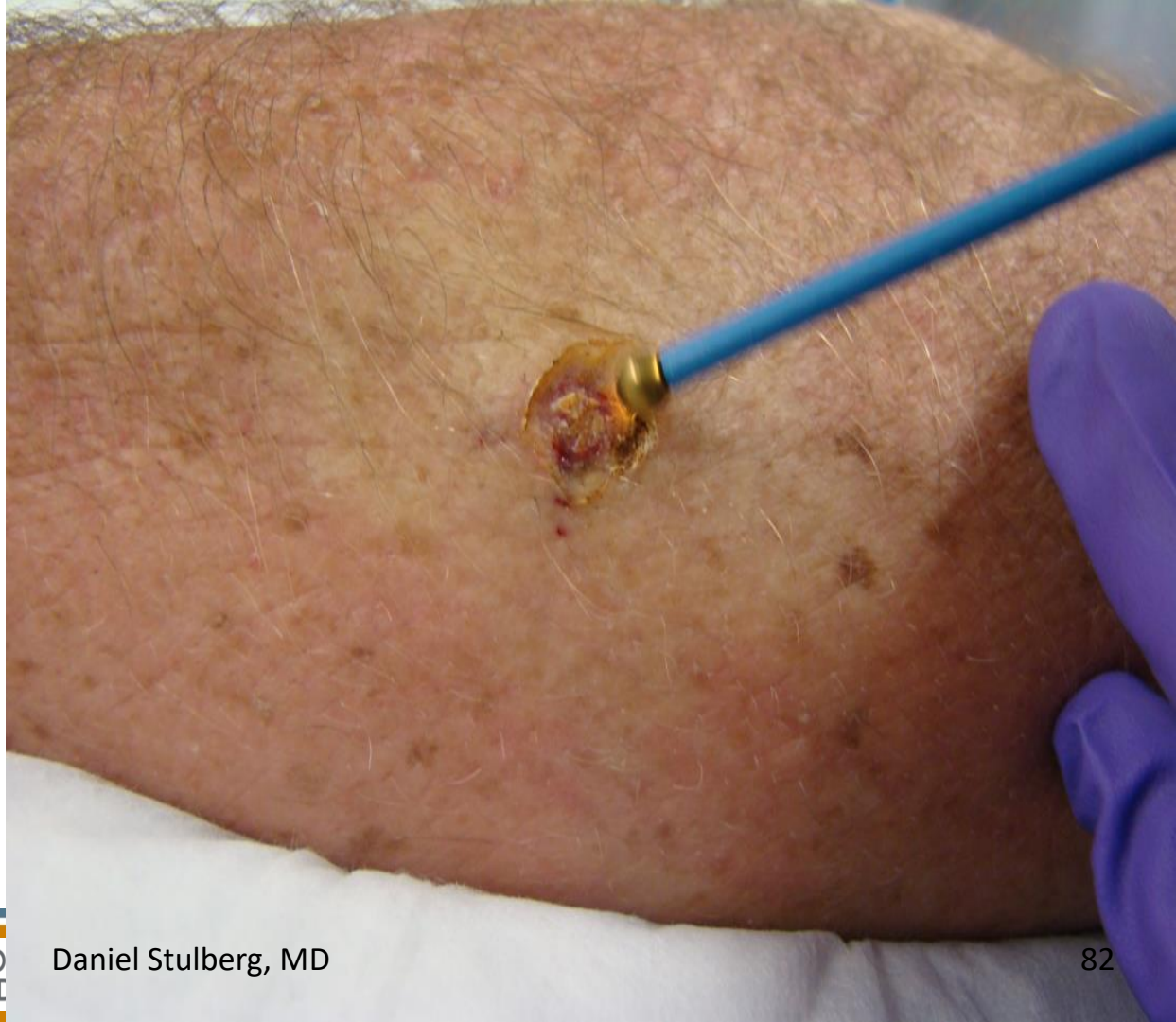
Activate Before Cutting

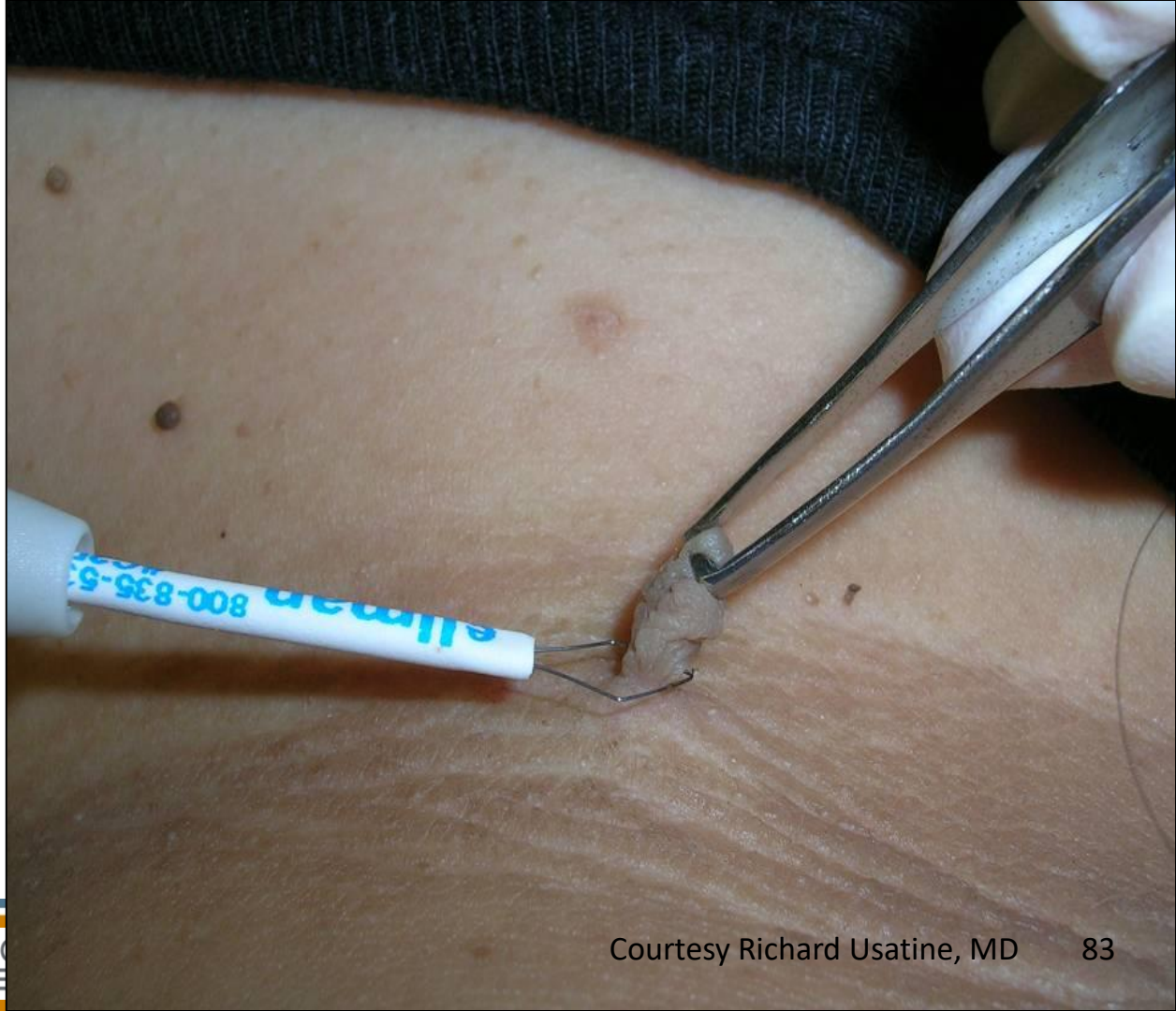




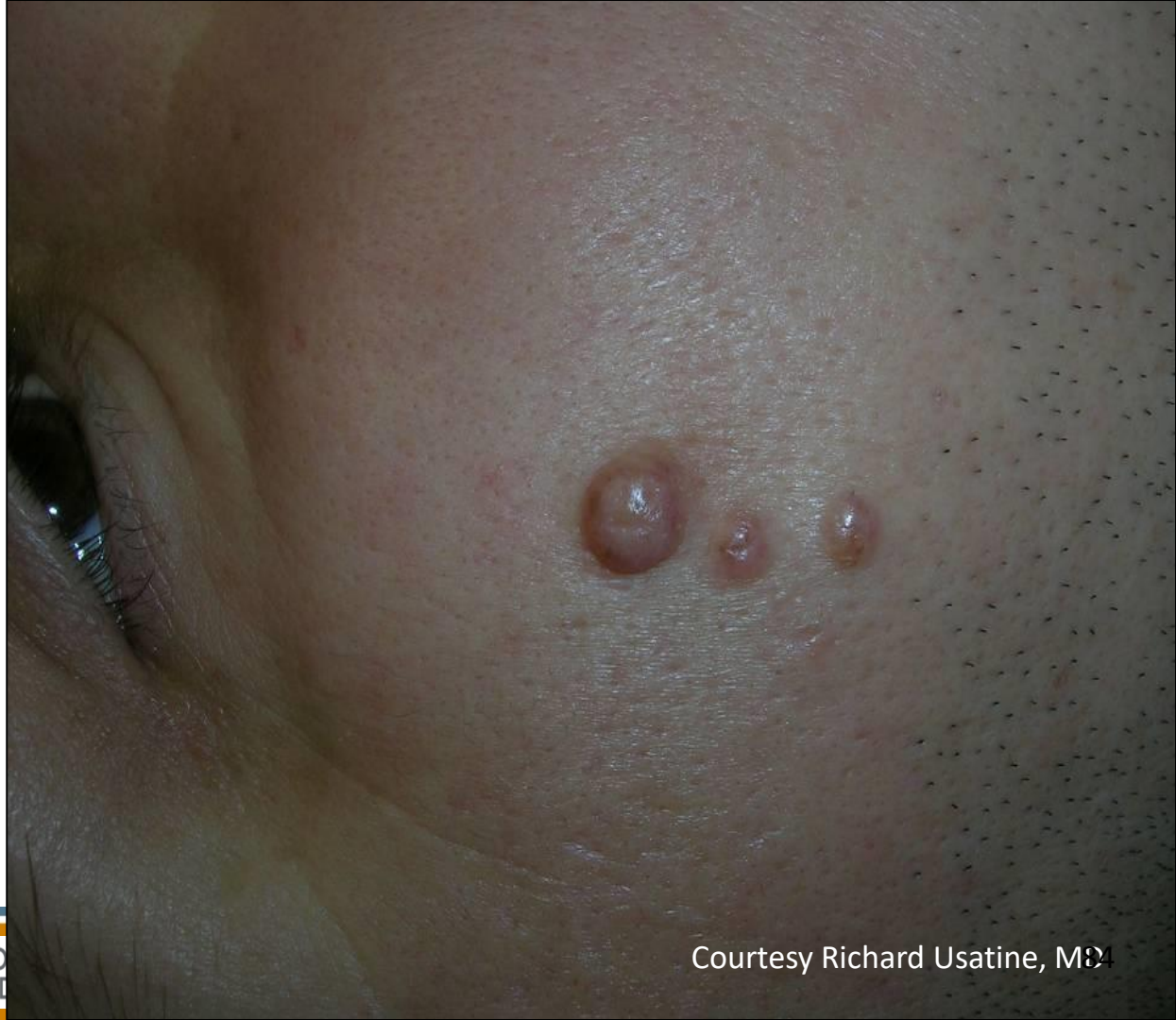




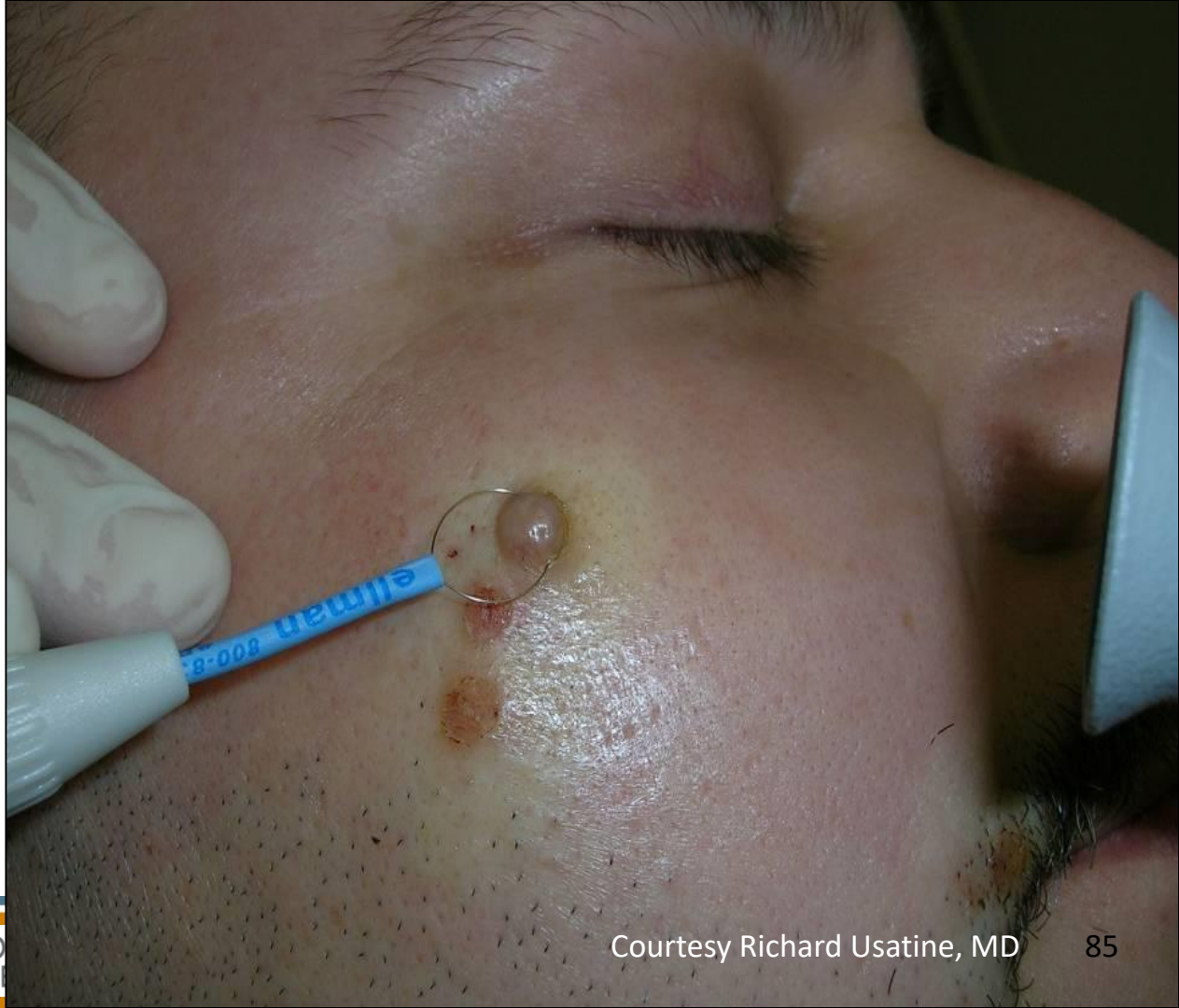




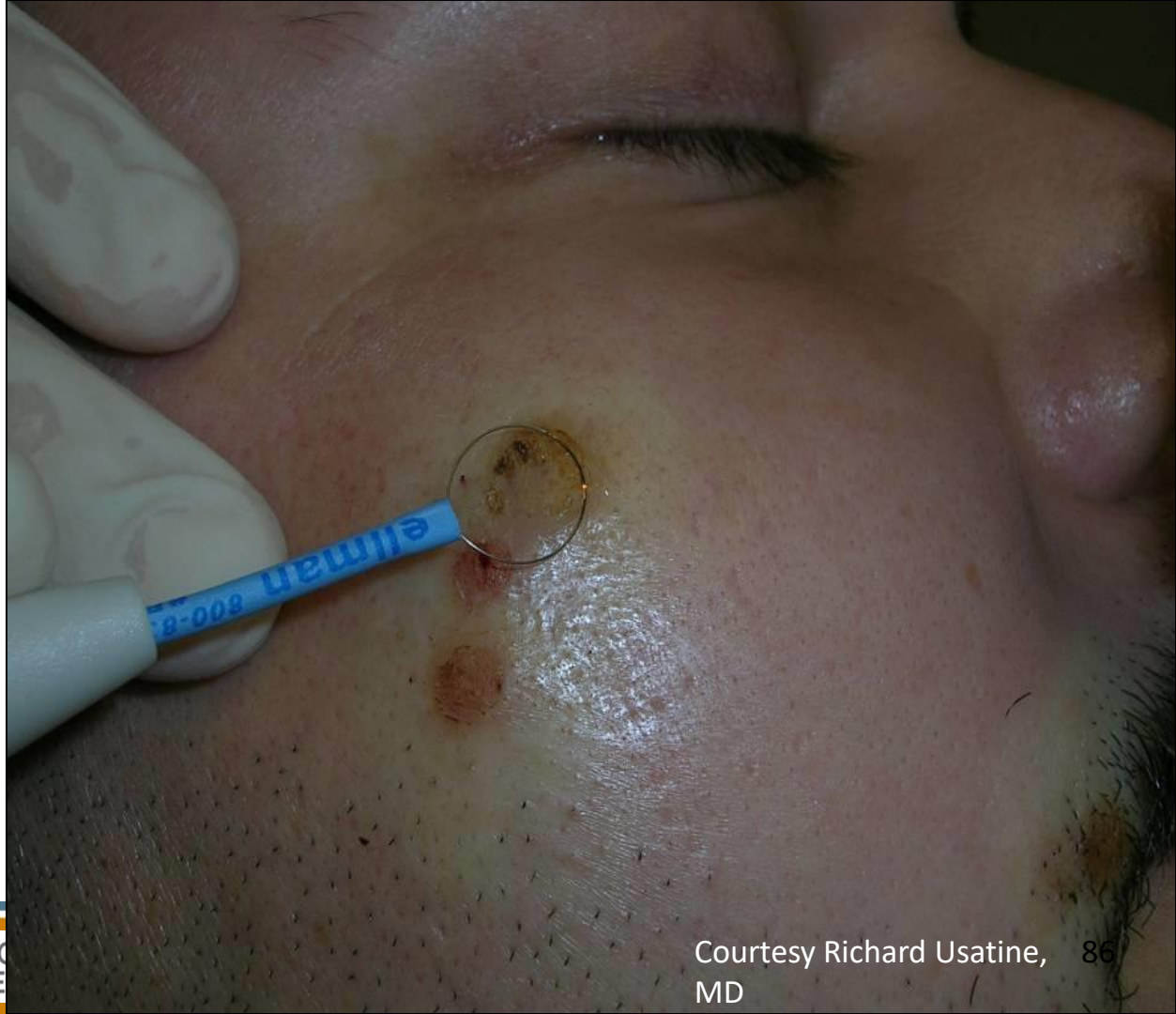
Courtesy Richard Usatine, MD



Courtesy Richard Usatine, MD



Courtesy Richard Usatine, MD



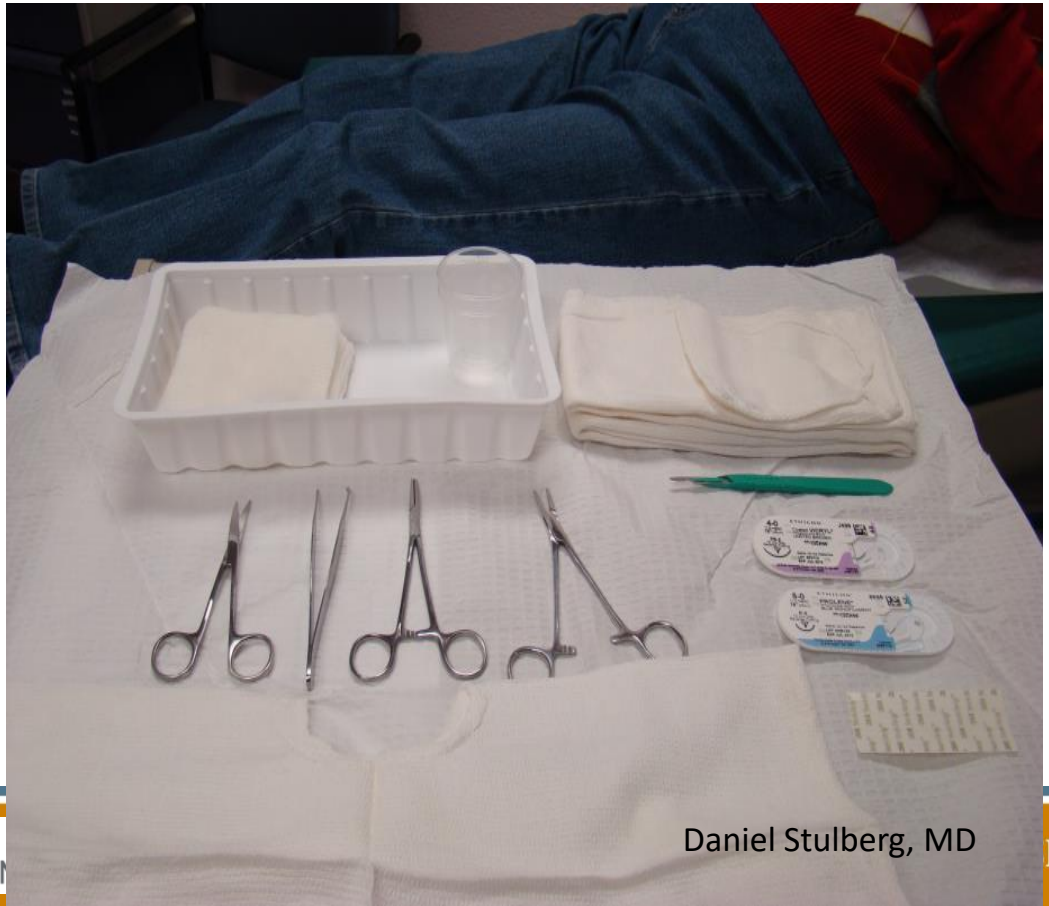
Courtesy Richard Usatine, MD

Punch Biopsy

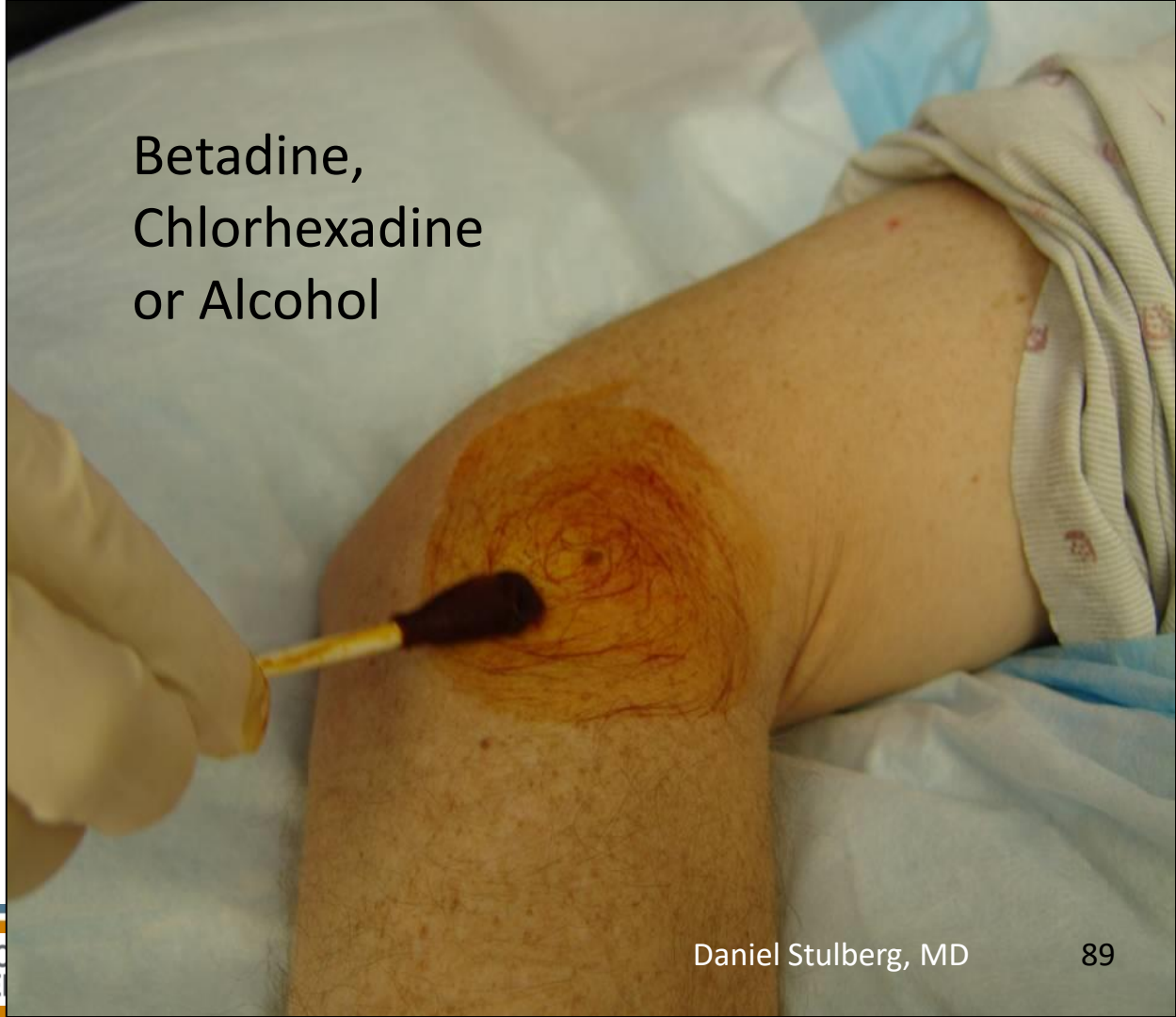
Diagnosis of:

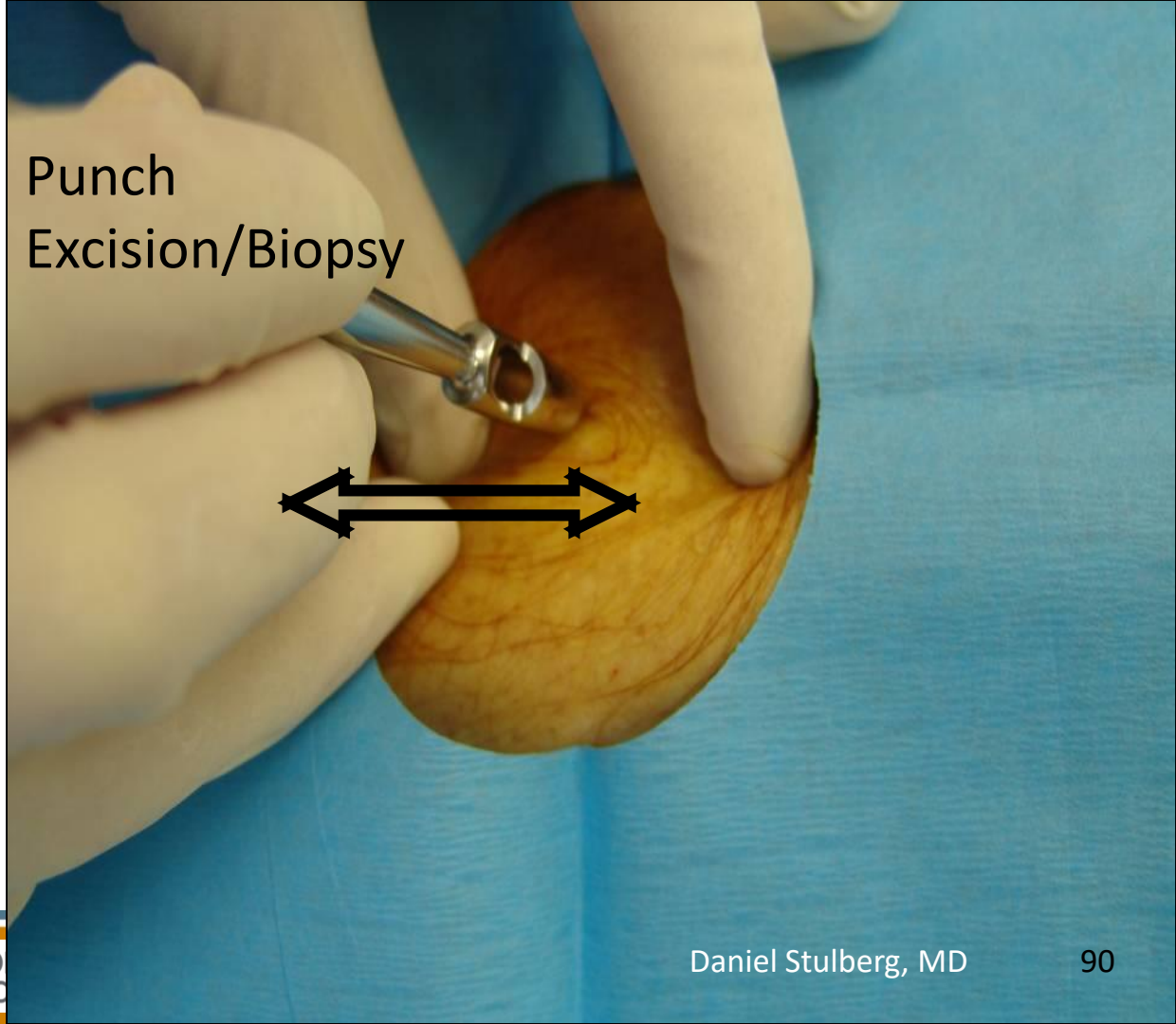
- inflammatory skin disease
  - Psoriasis
  - Vasculitis
  - Lupus
- Infiltrative diseases
  - Sarcoid
  - Mycosis fungoides
- Caution if planning EDC of NMSC

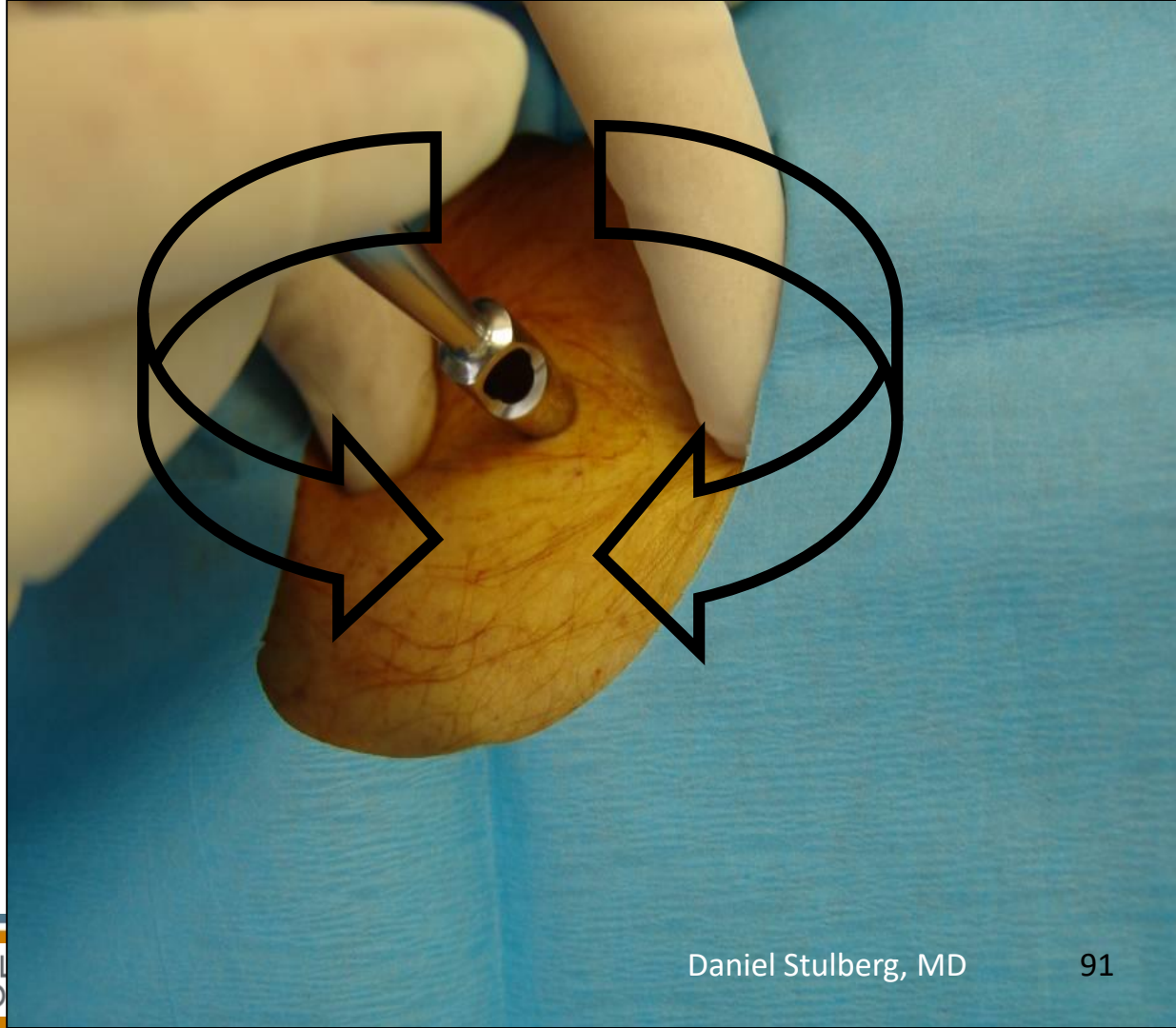
Suturing Set Up

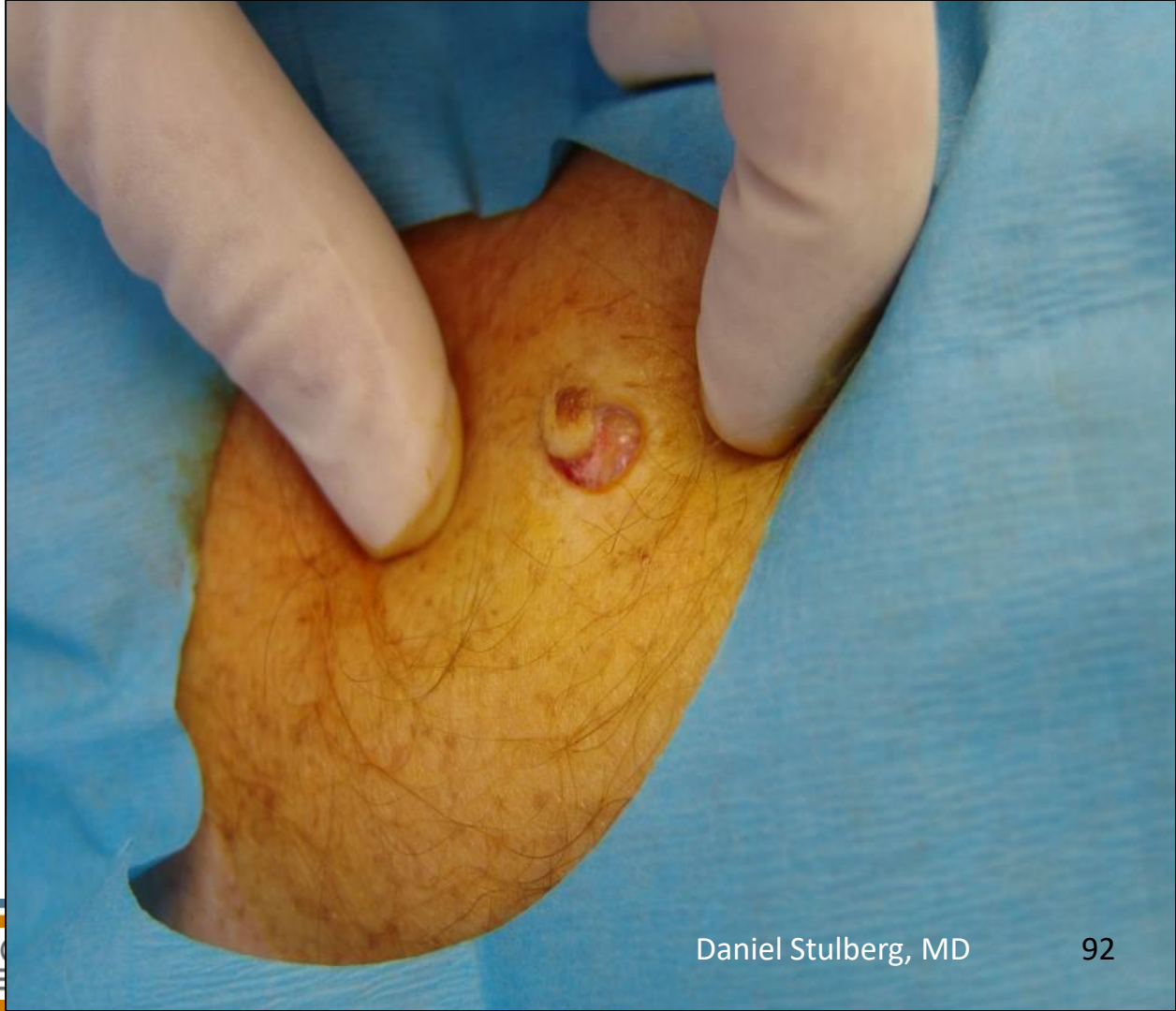


Daniel Stulberg, MD


Betadine,
Chlorhexadine
or Alcohol


Punch
Excision/Biopsy





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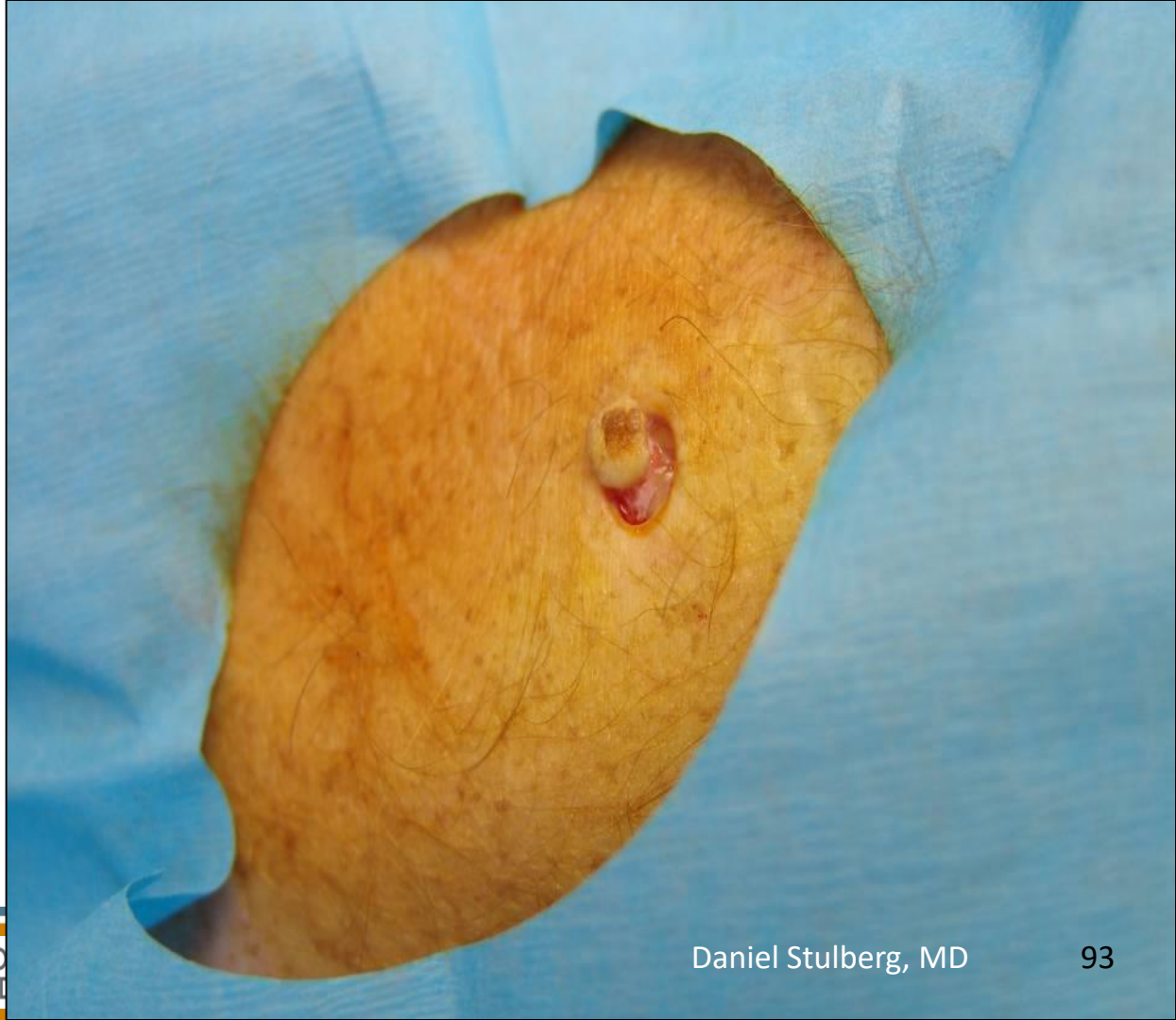

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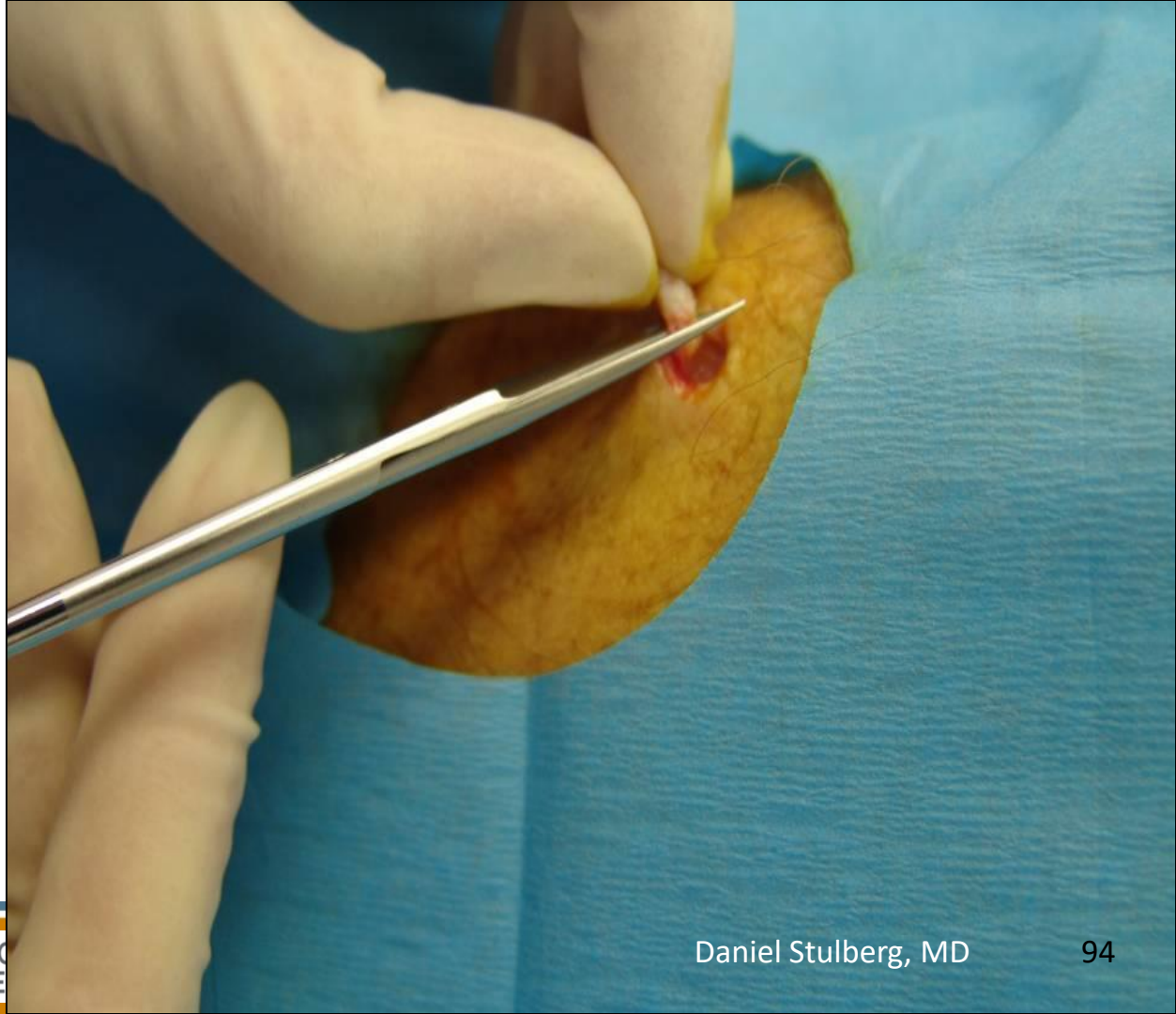

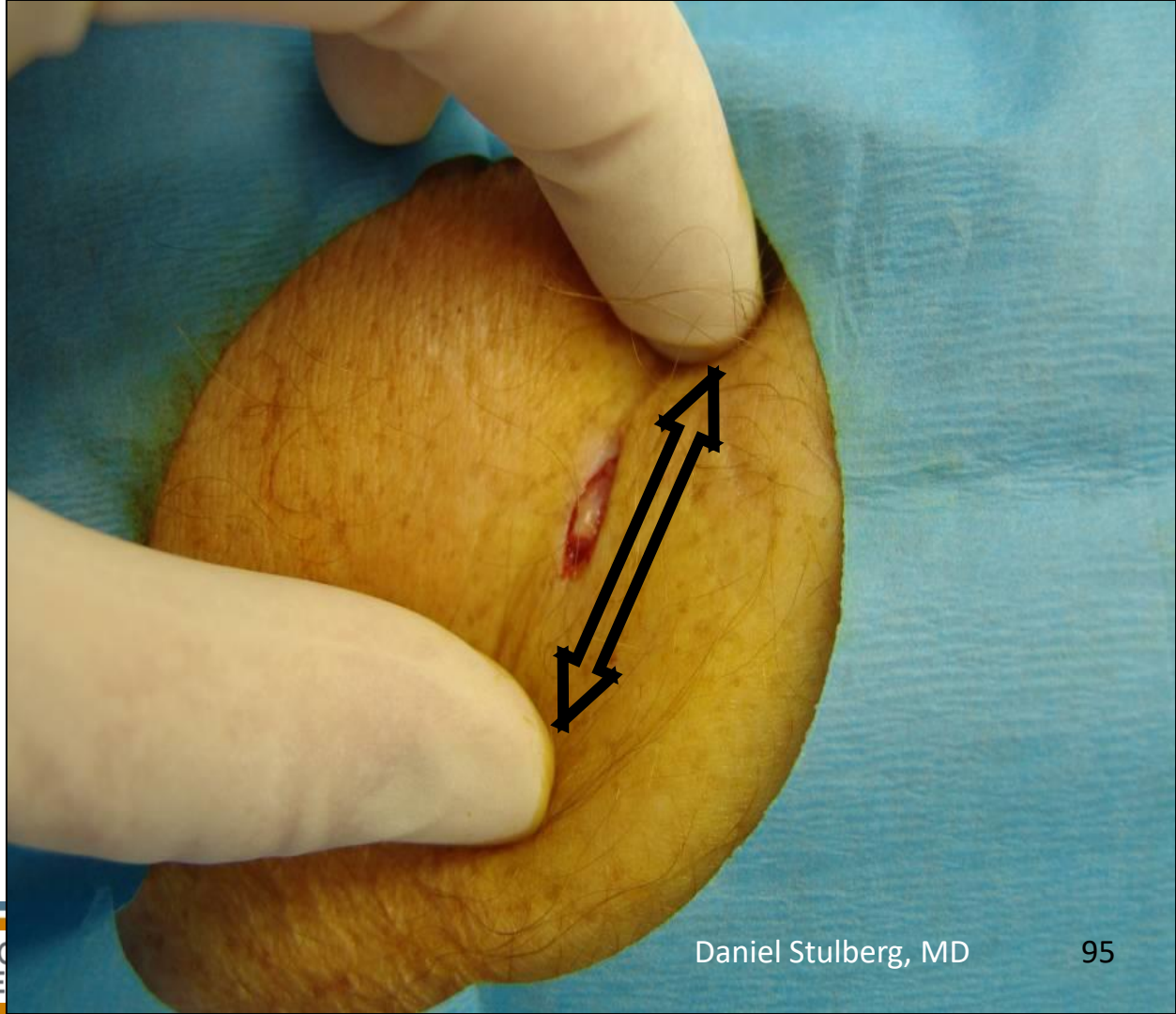

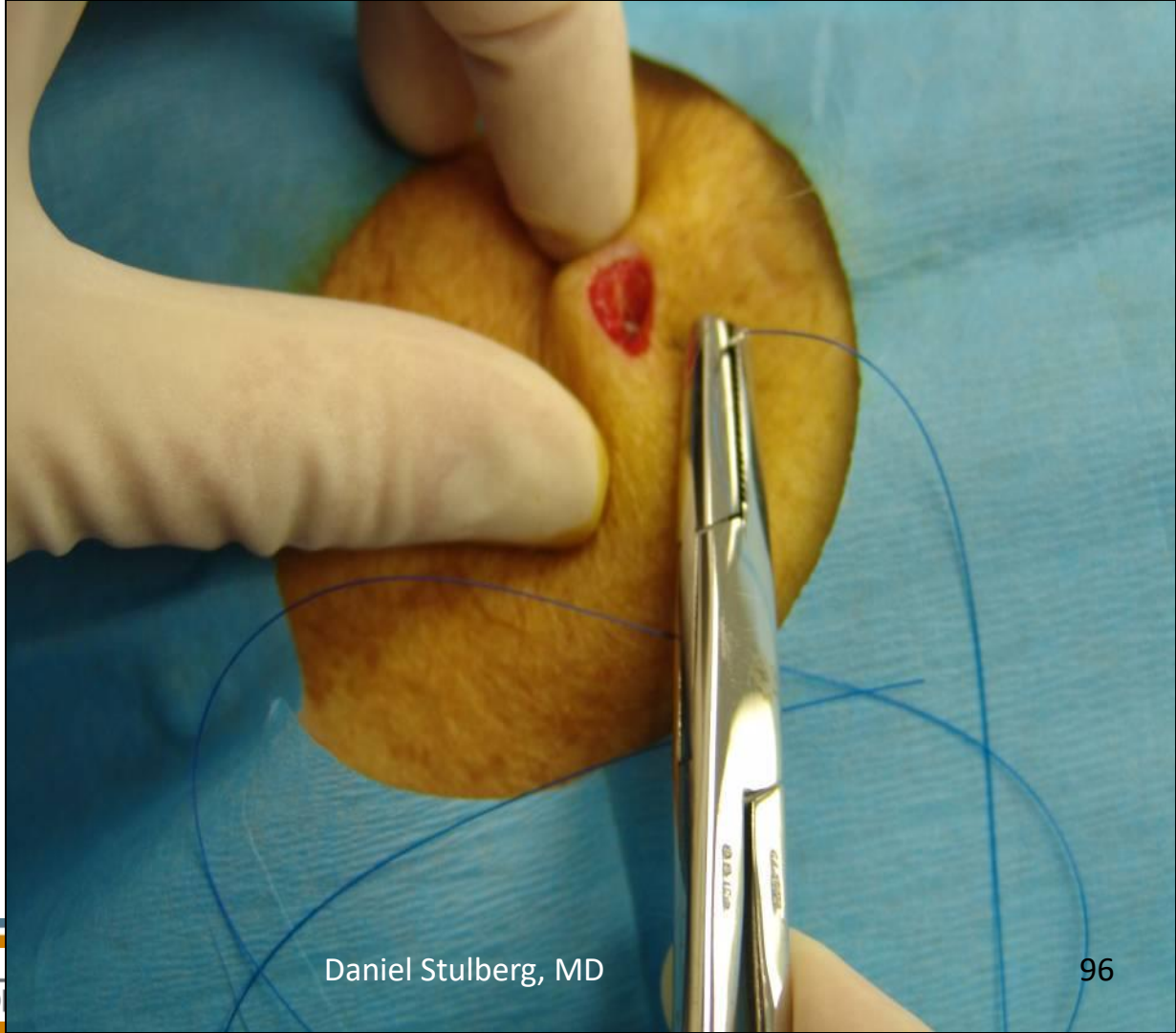

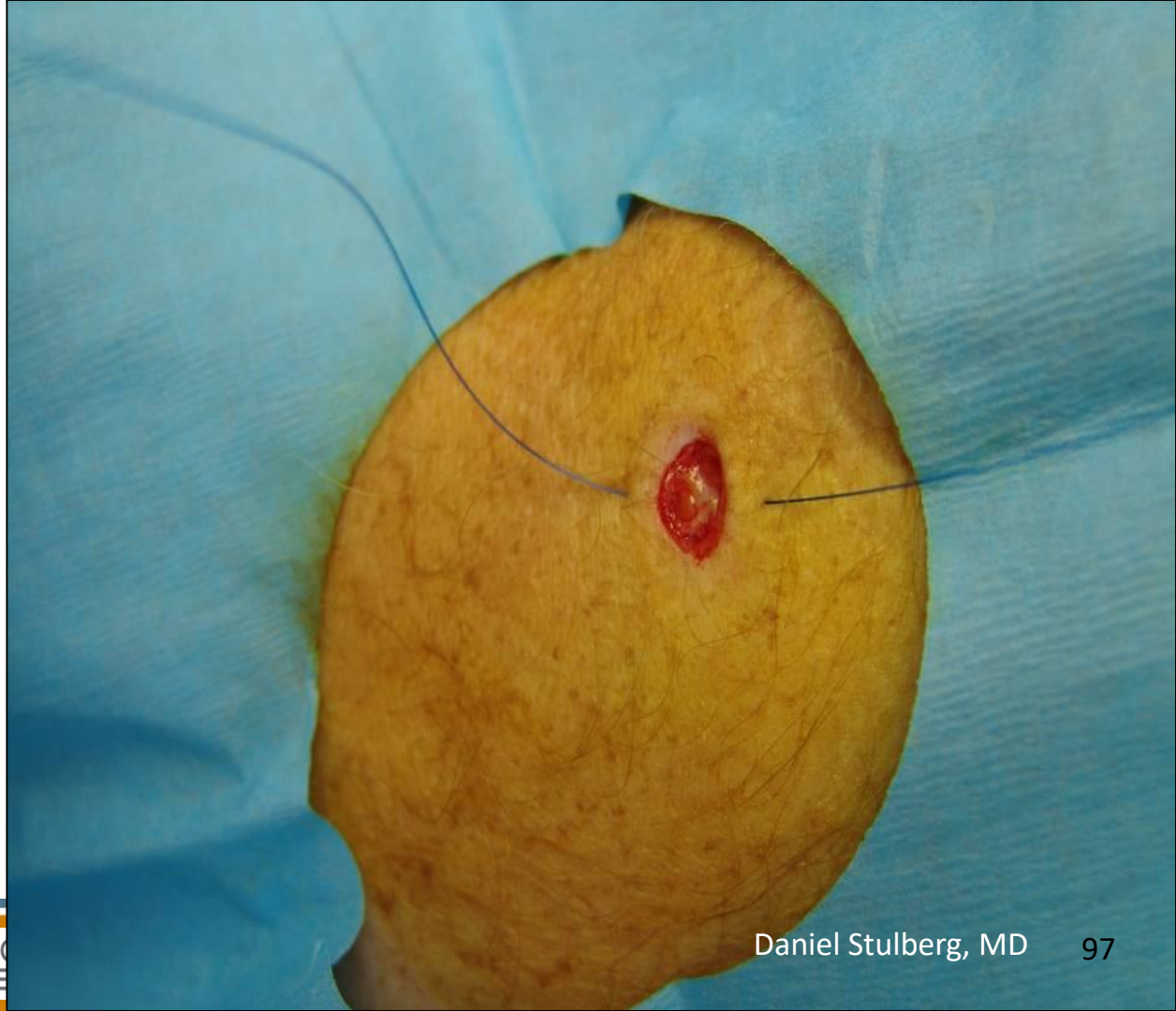

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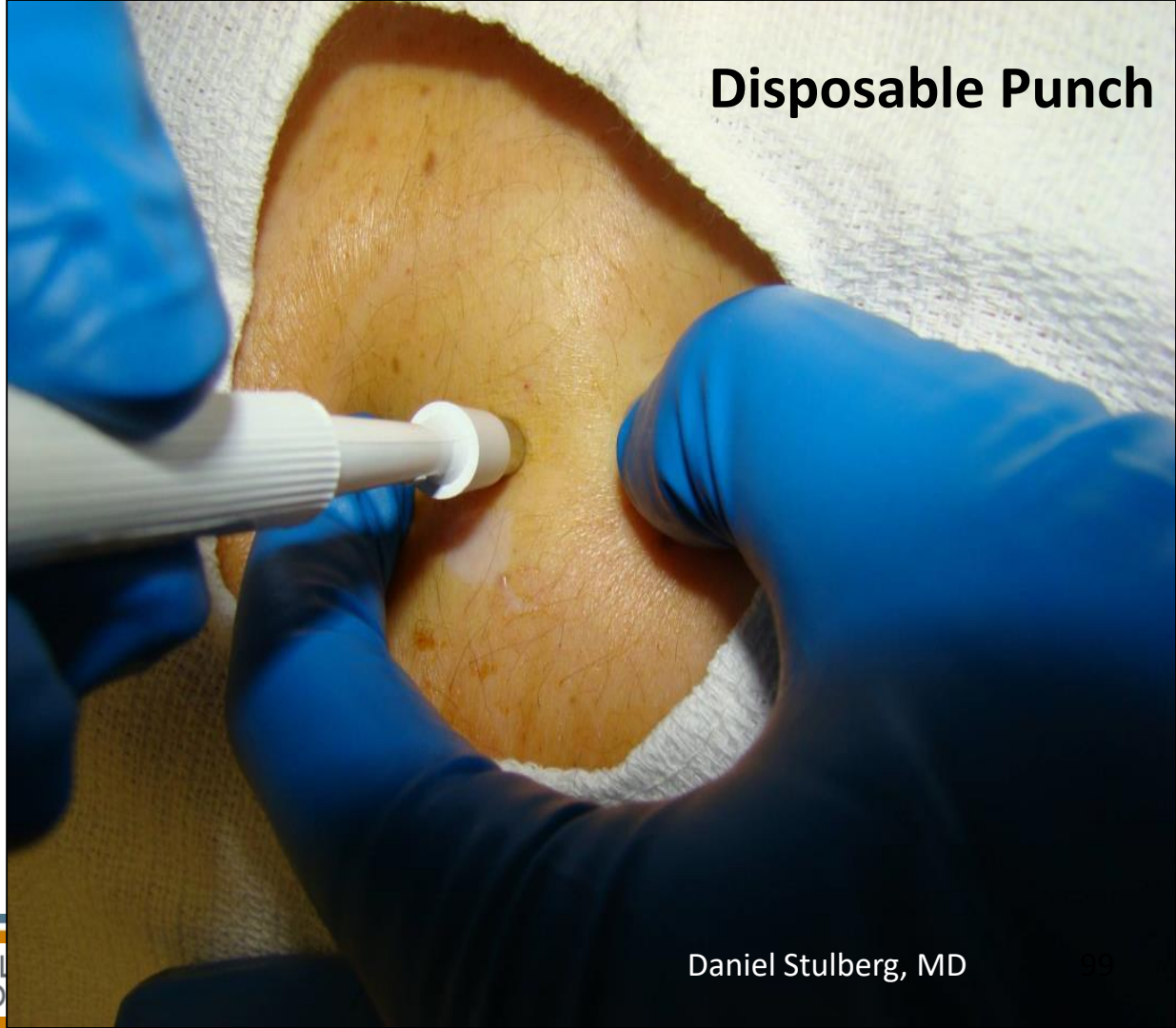
Disposable Punch



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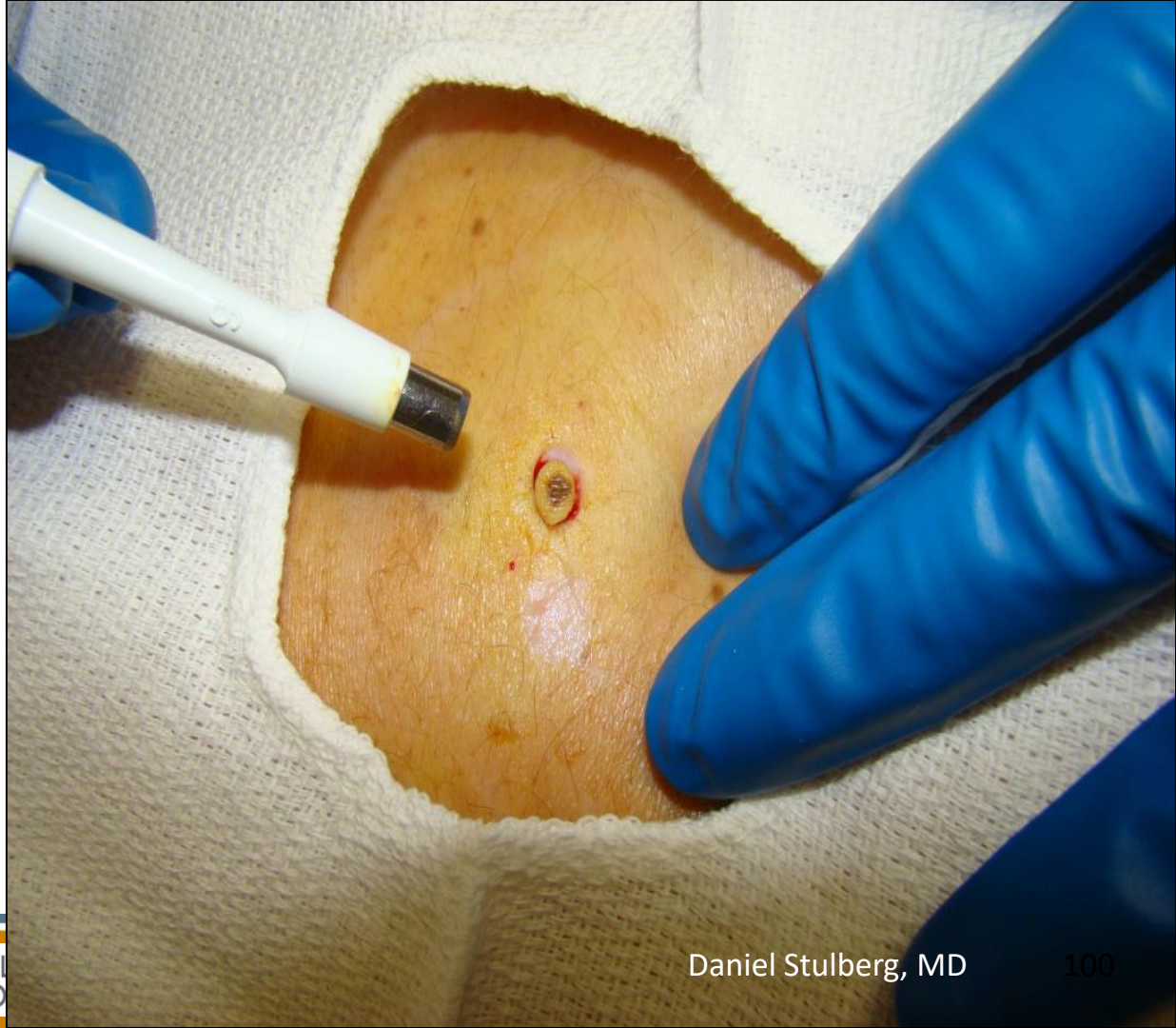

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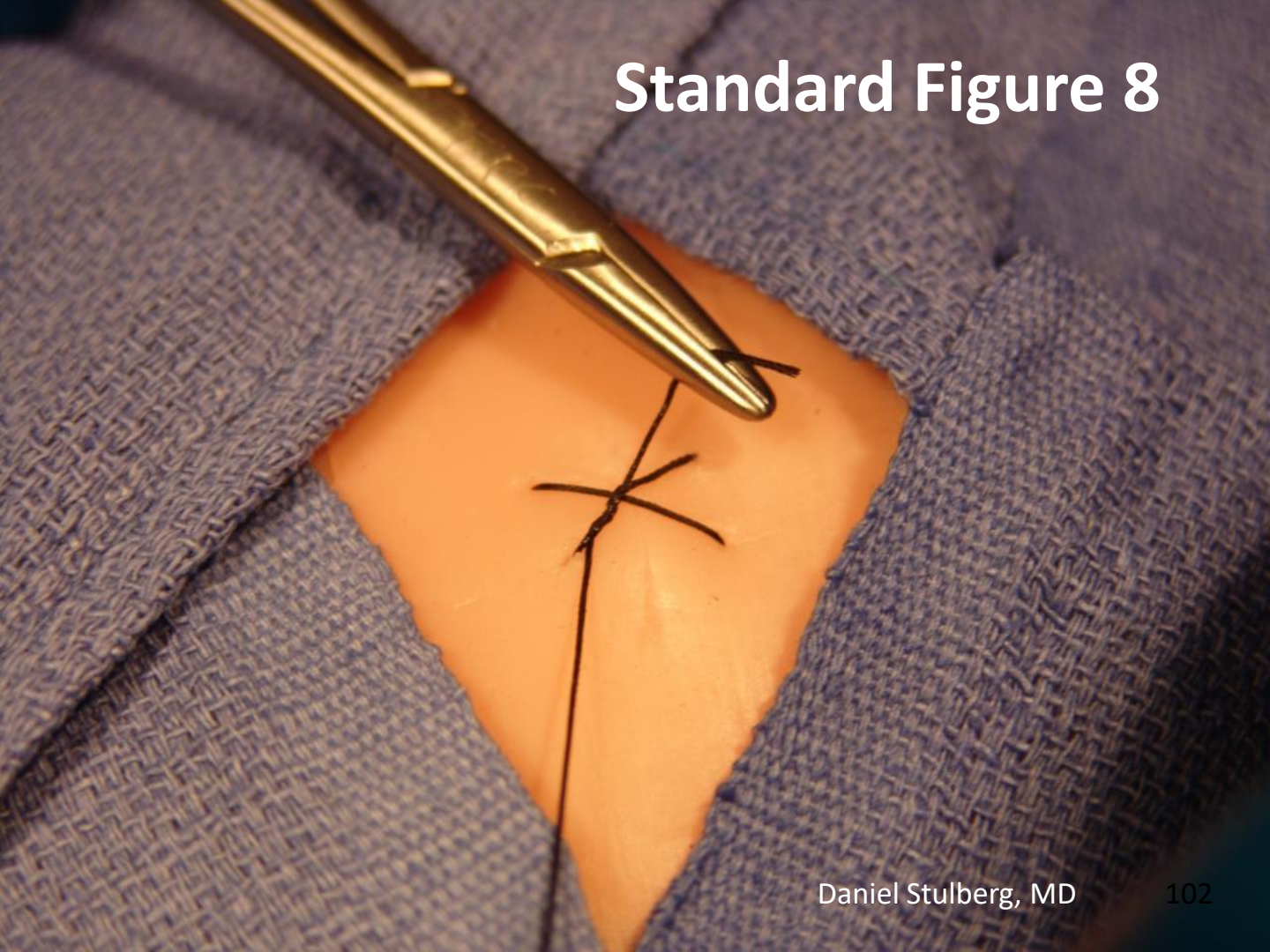
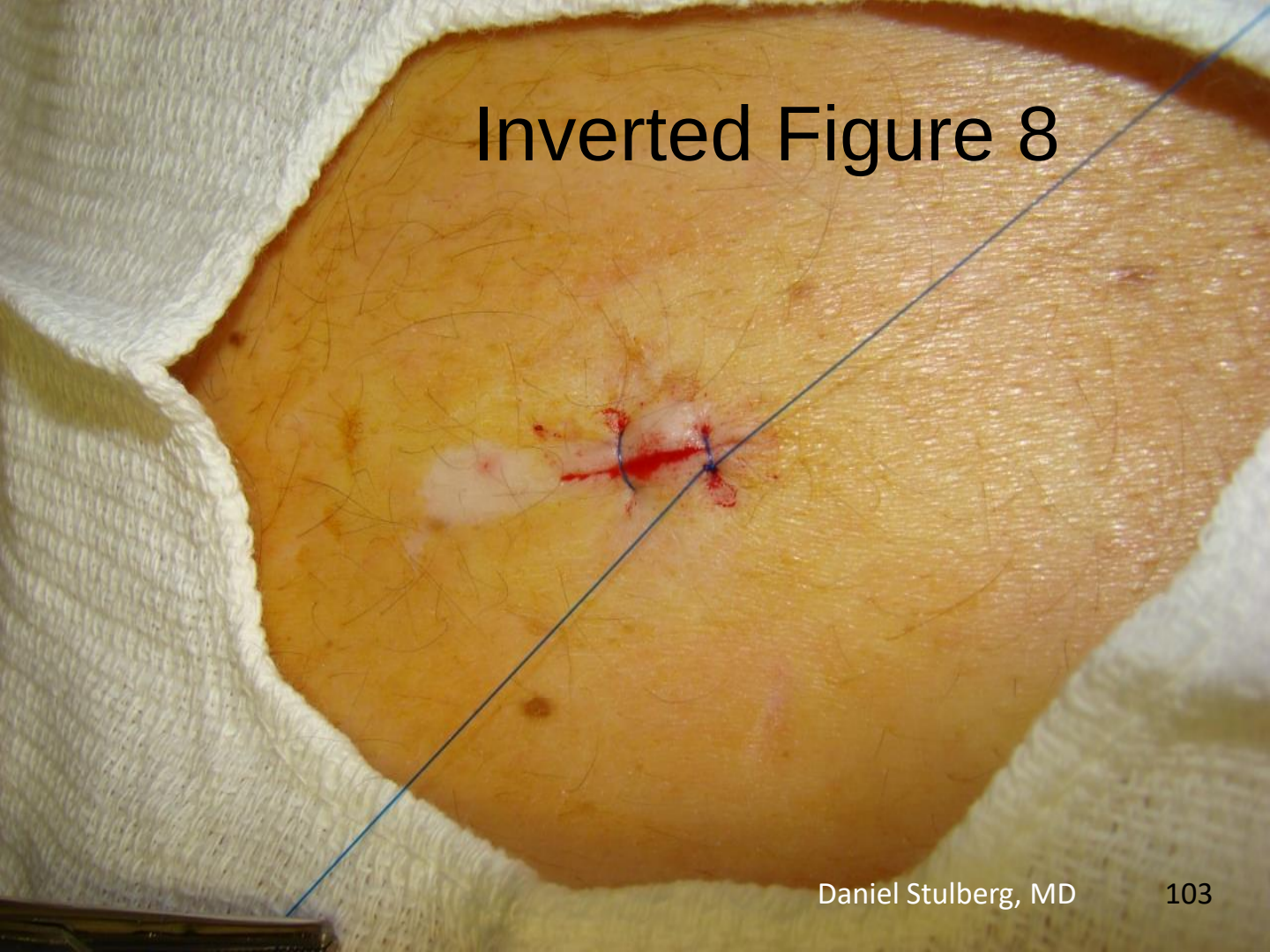
Figure 8 and Inverted Figure 8

- Big time saver

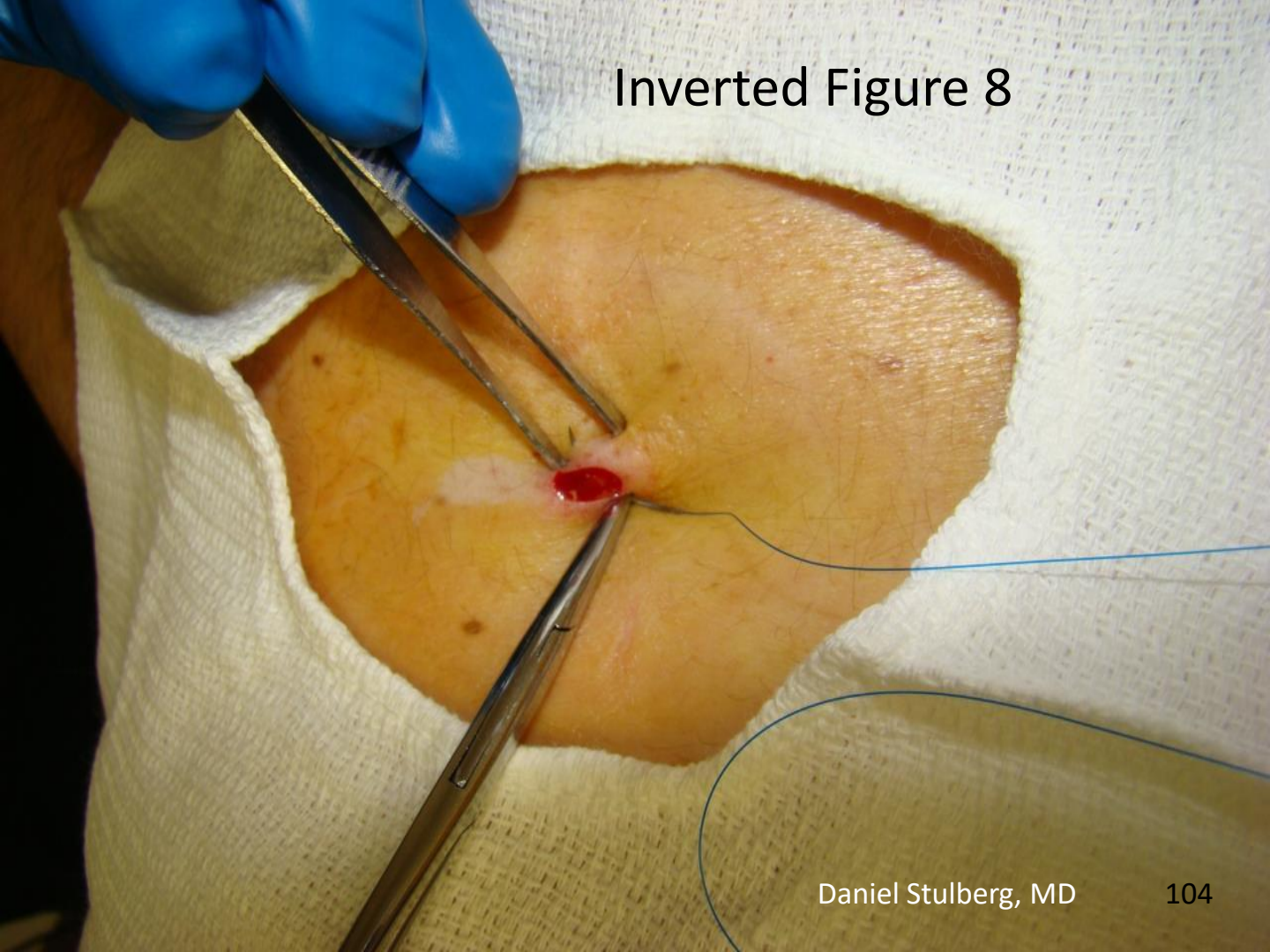
Standard Figure 8

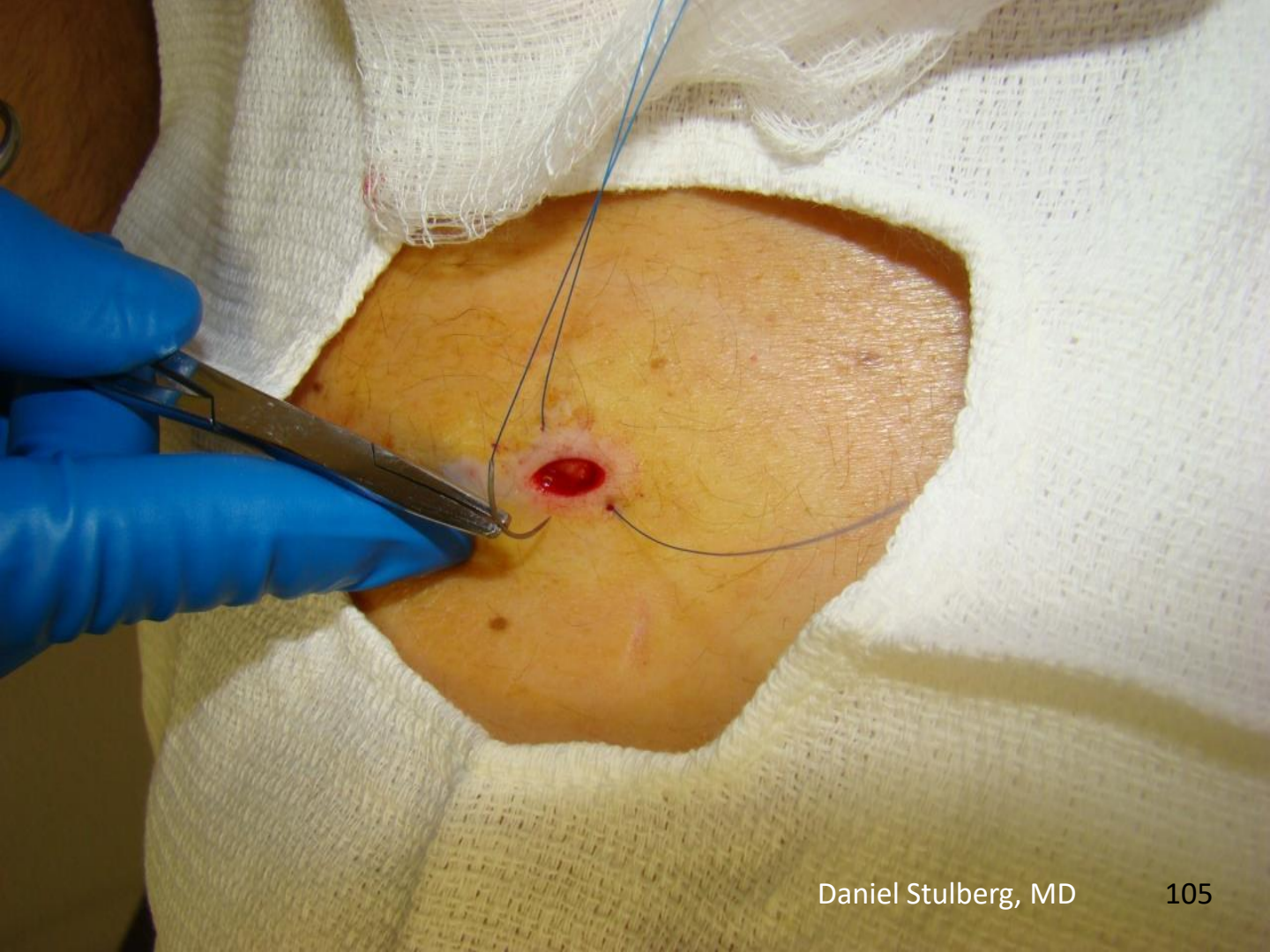


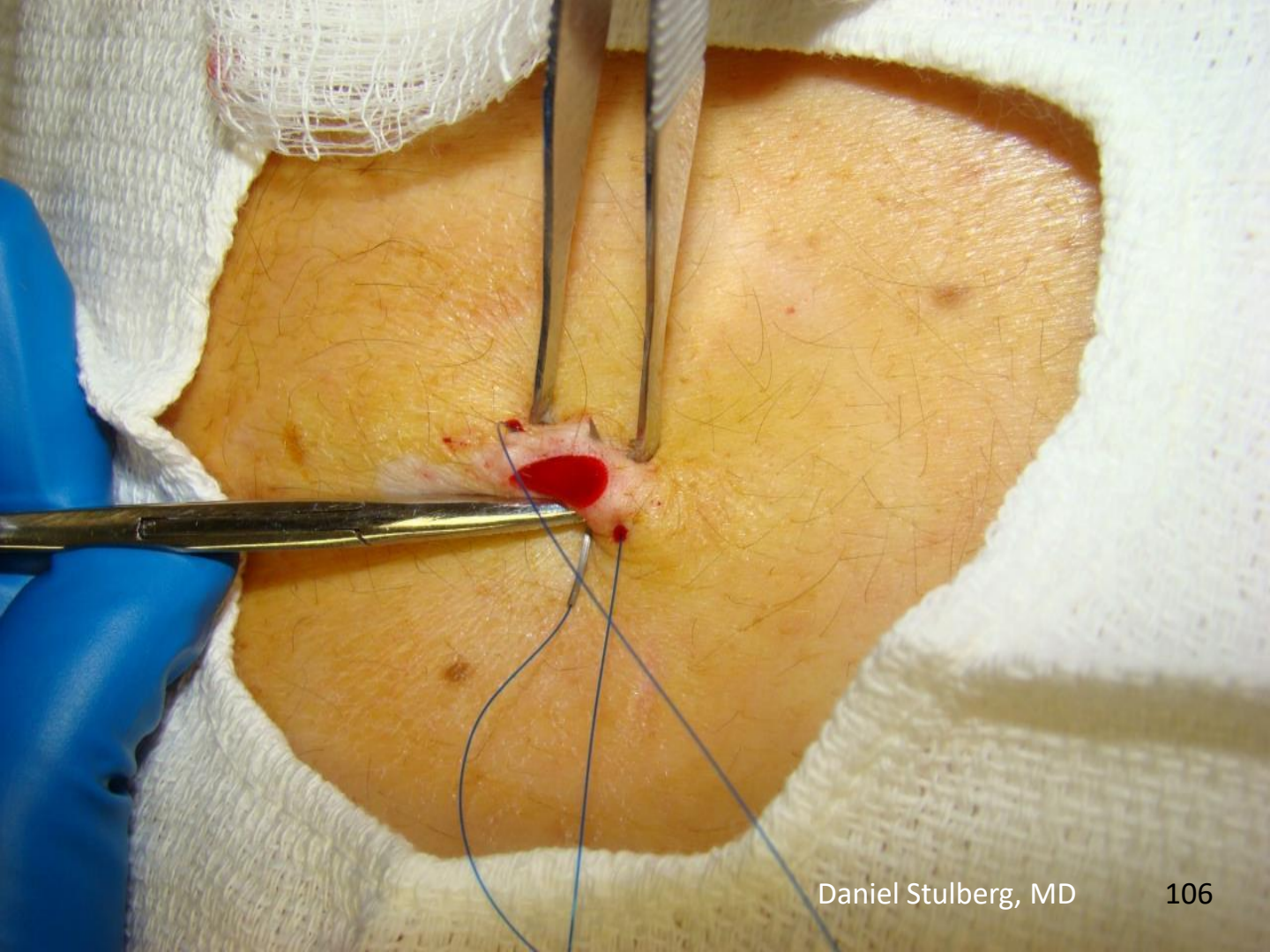
Inverted Figure 8

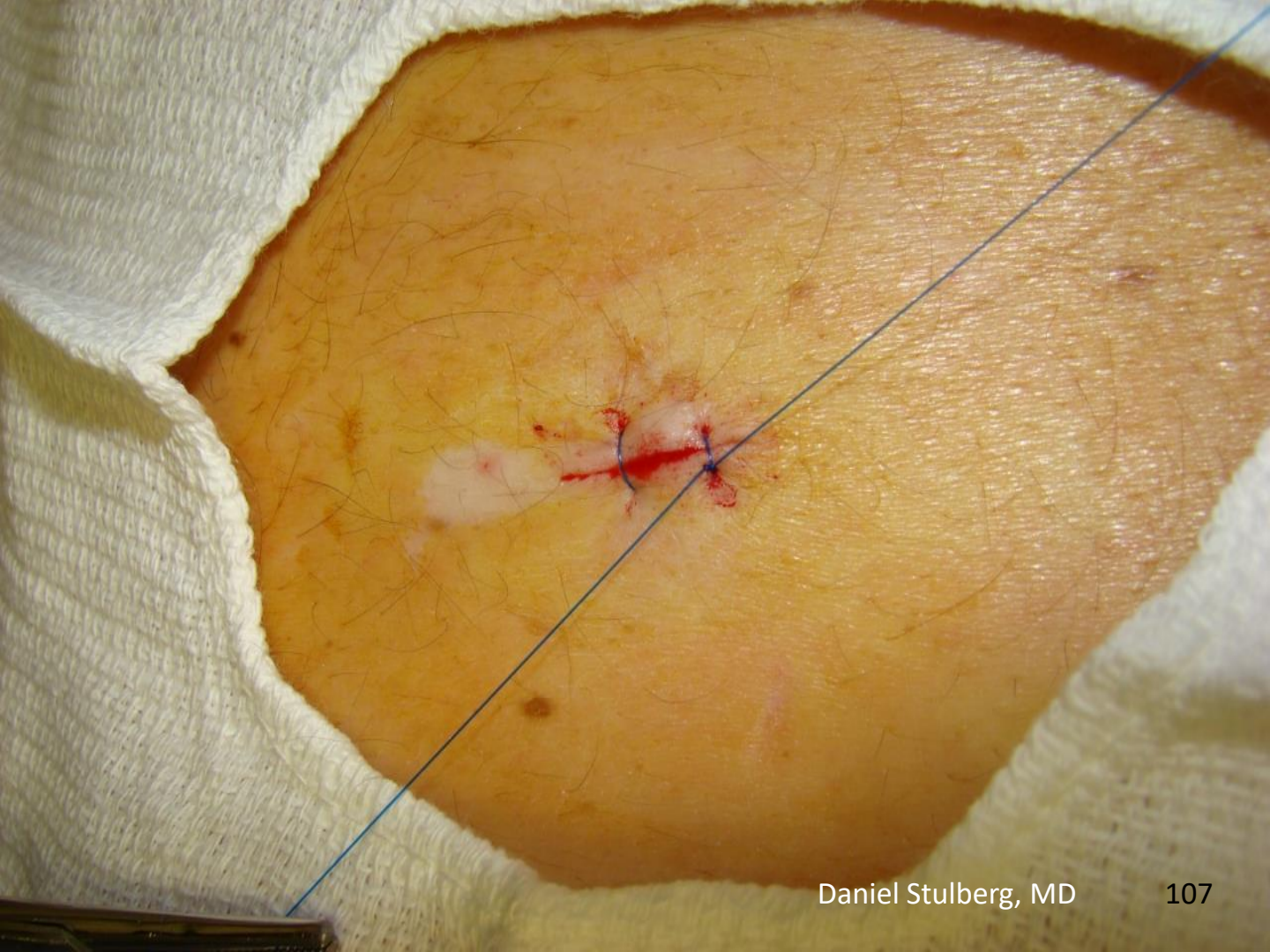


Inverted Figure 8

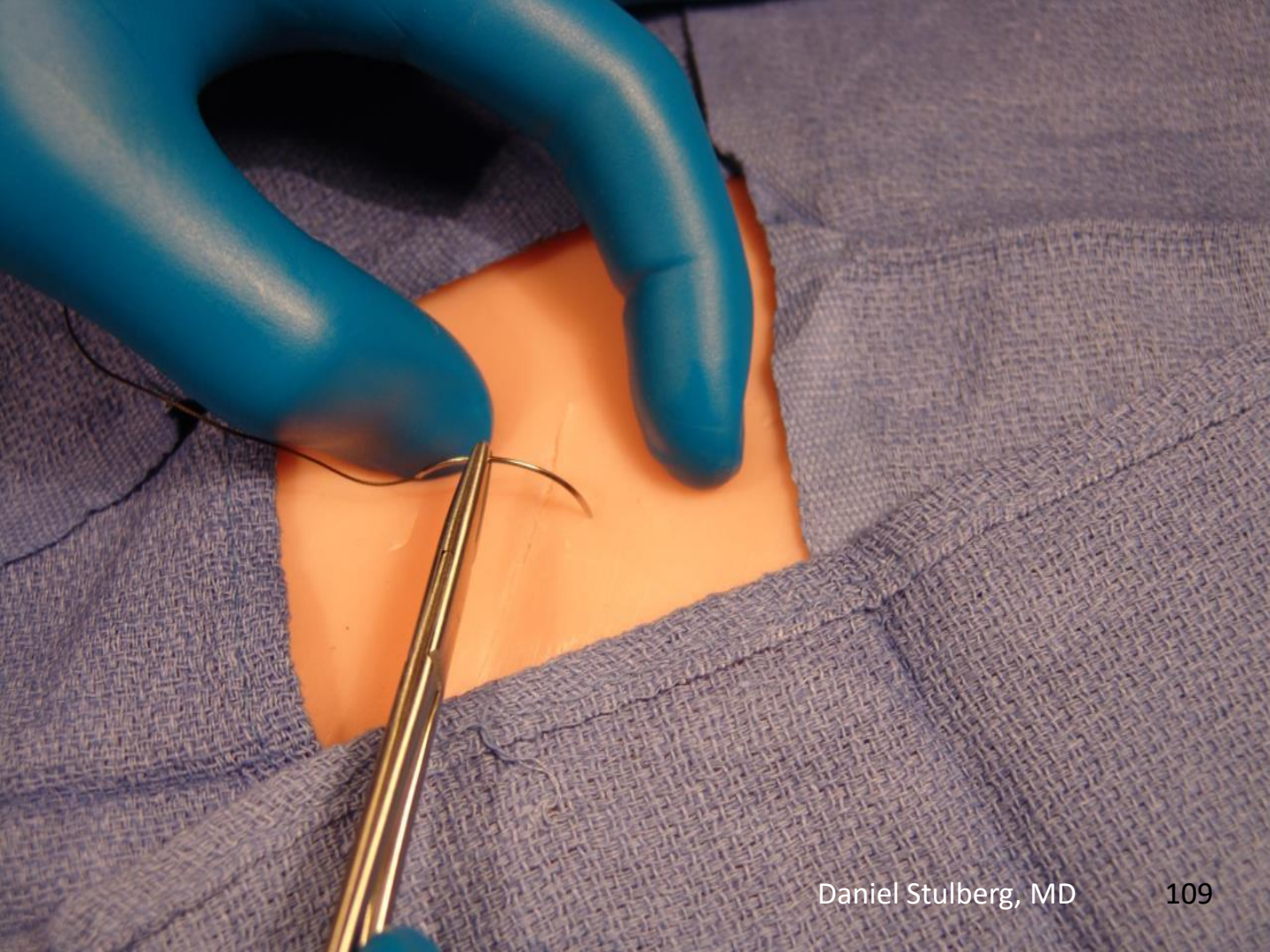


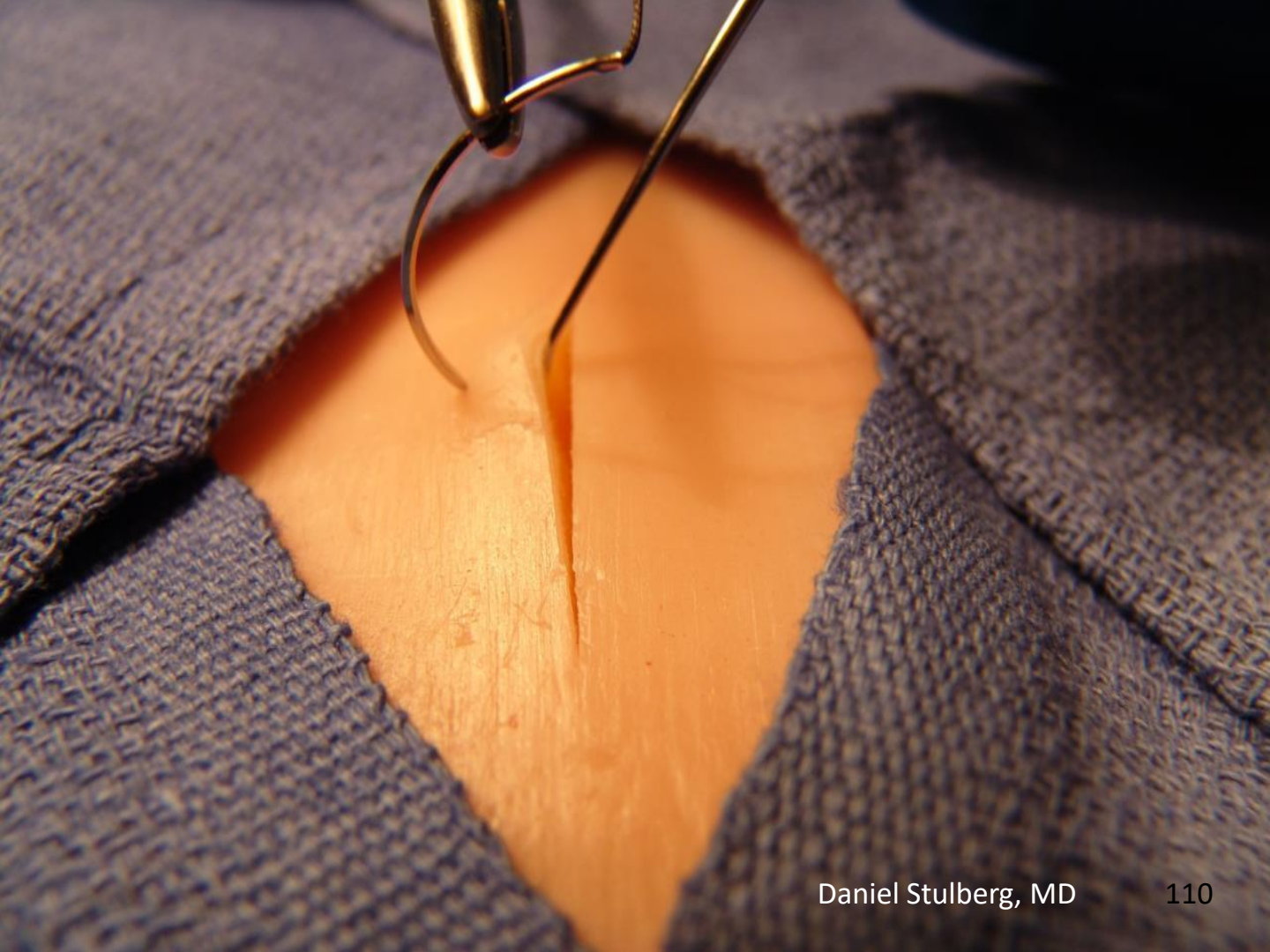






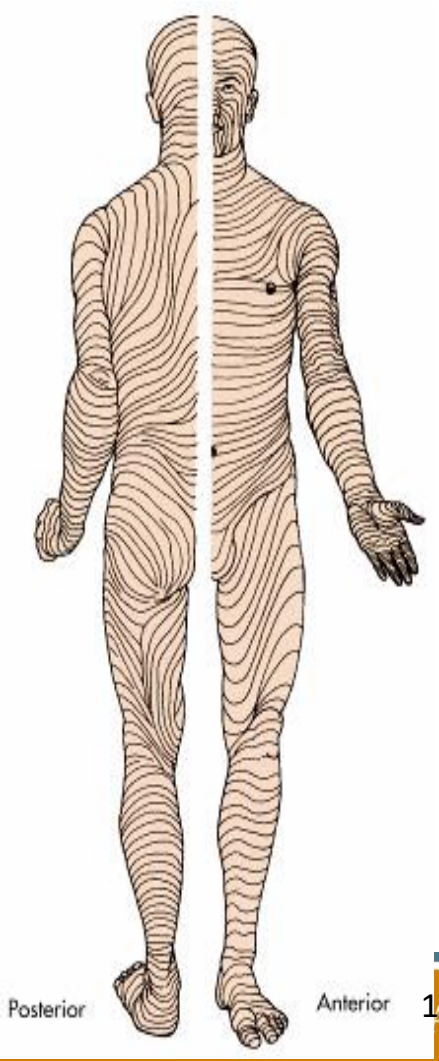
Review - Everting skin edges





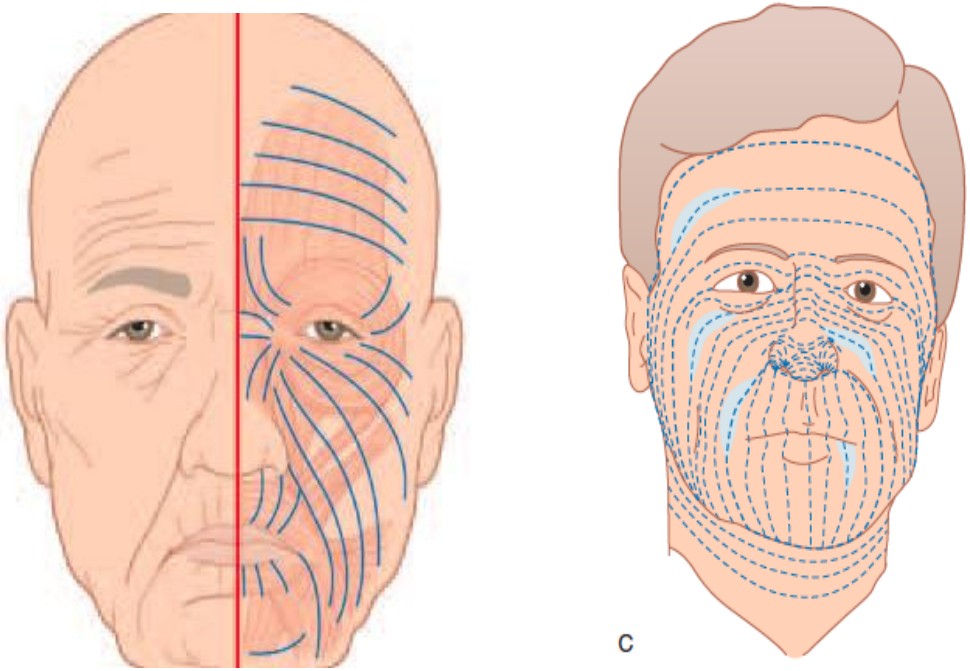
Placement of the Incision Line

- Relaxed skin tension lines
- Stretch/pinch the skin
- Excise and see…



Courtesy of Dermatologic and Cosmetic Procedures in Office Practice.

Facial Skin Tension Lines



Courtesy of Dermatologic and Cosmetic Procedures in Office Practice.

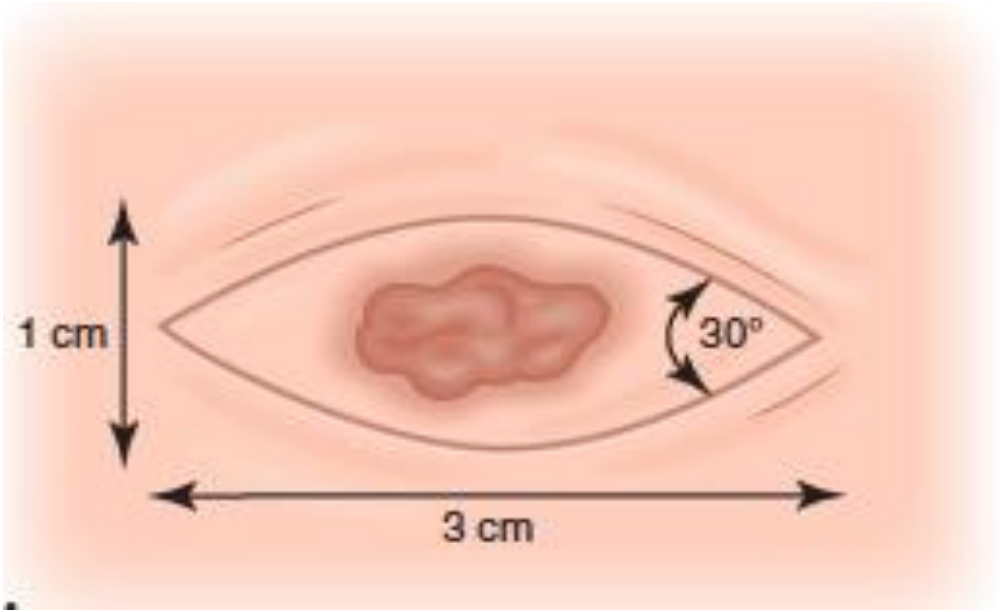
Practice

- Punch
- Try web space if pig's foot has one, or if softer ventral side
- Practice inverted figure 8 suture

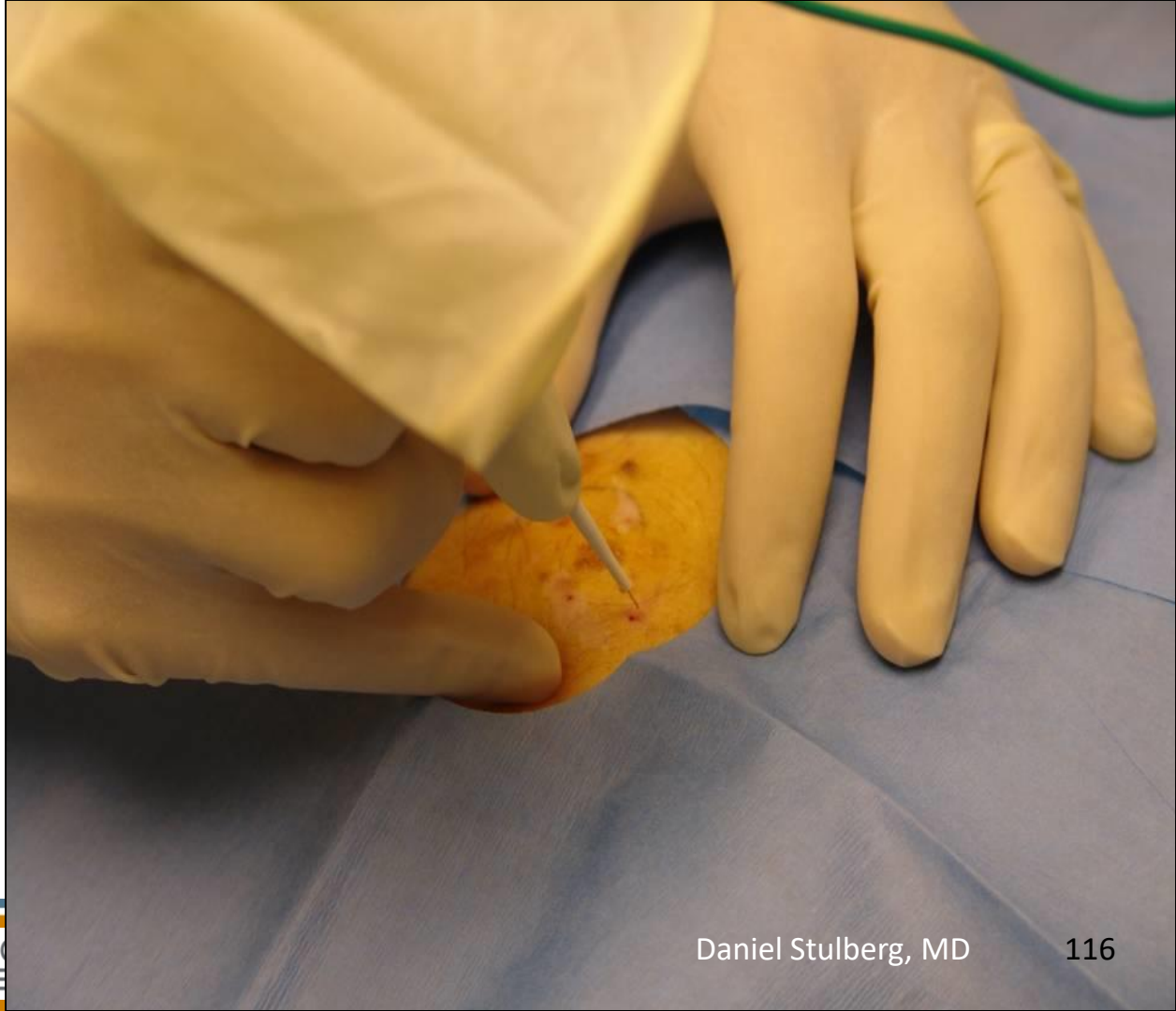
Review of elliptical excision

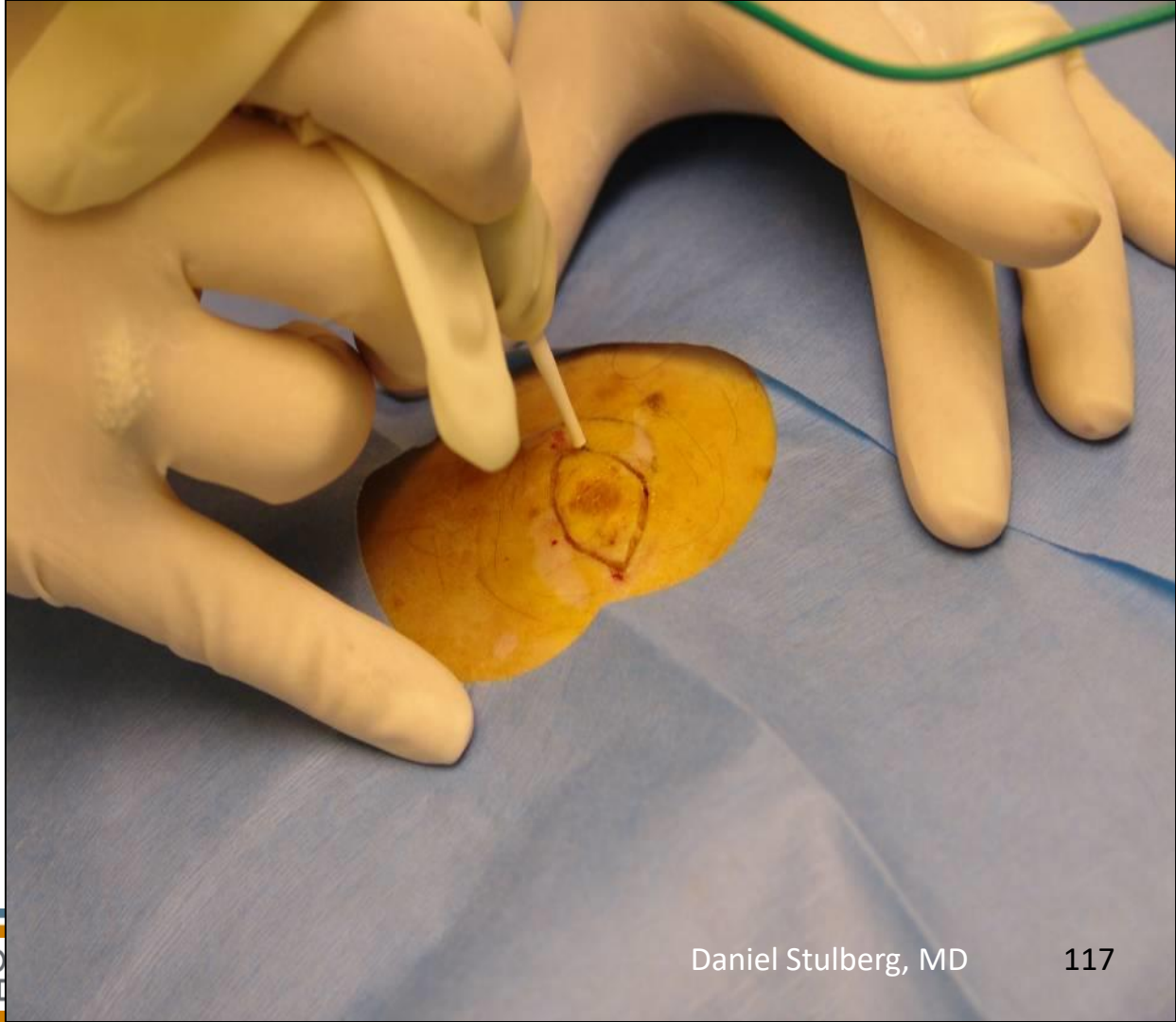
- Scalpel
- Radiofrequency Electrosurgery

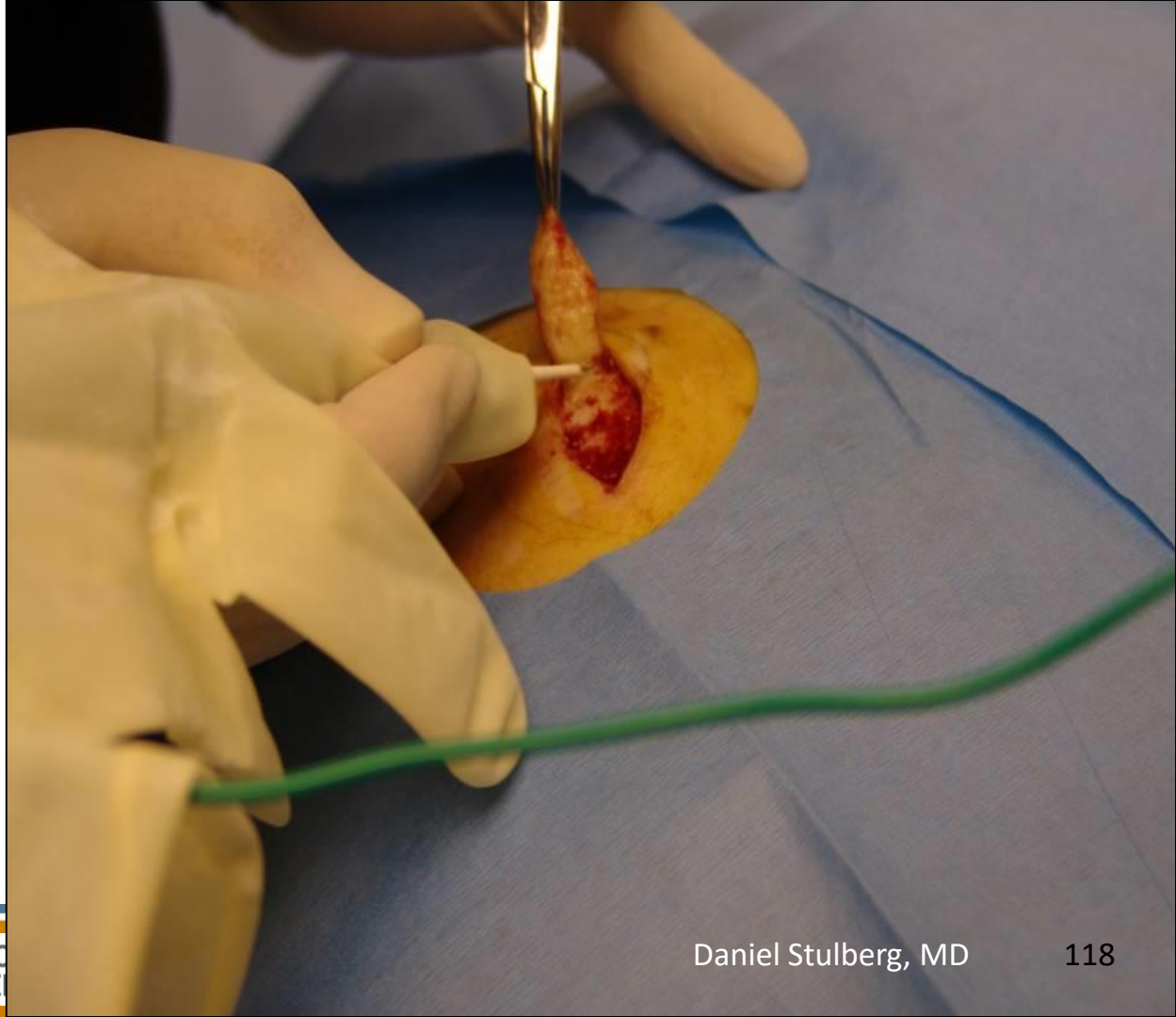
Cutting an ellipse -3:1 ratio

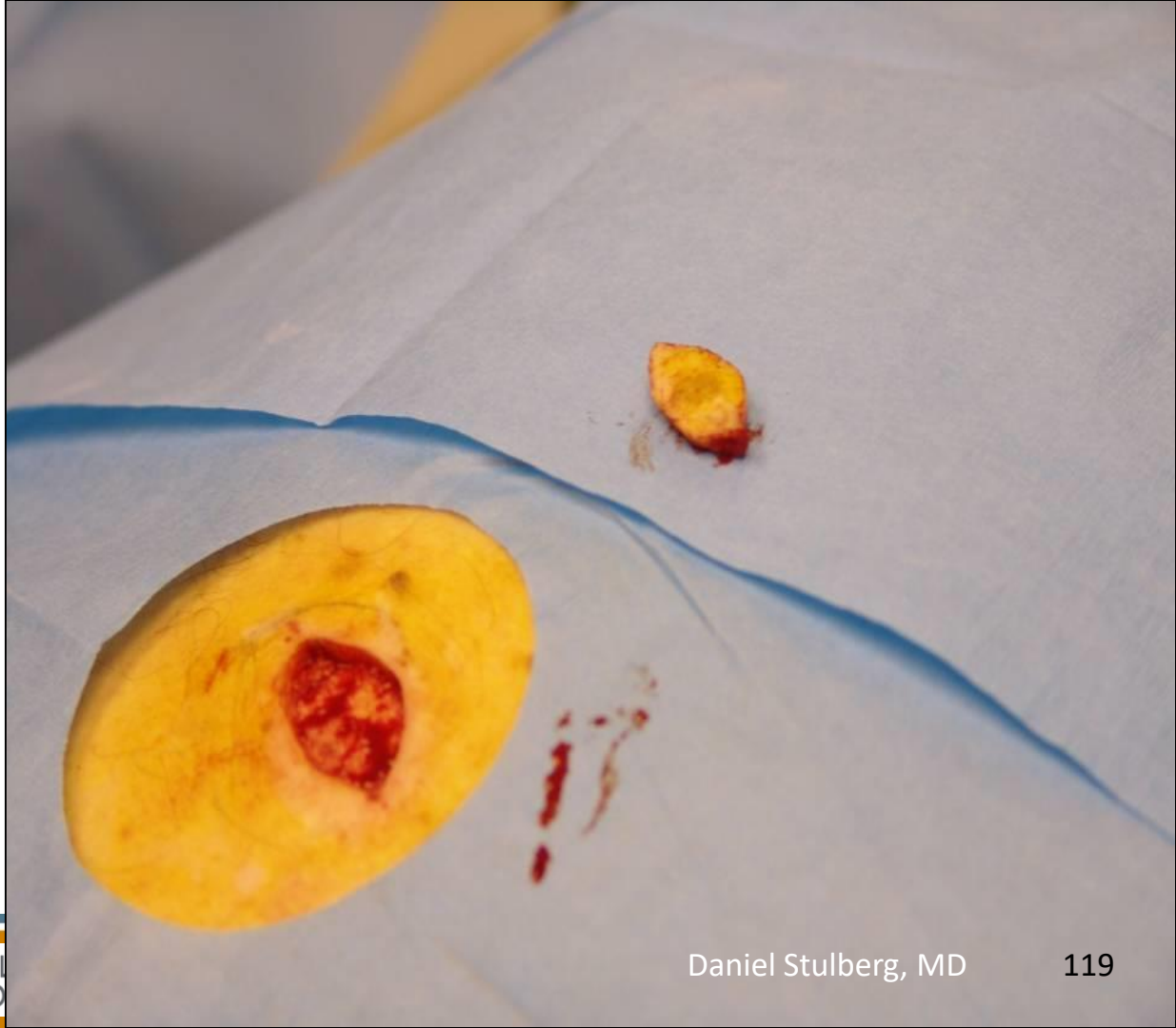


Courtesy of Dermatologic and Cosmetic Procedures in Office Practice

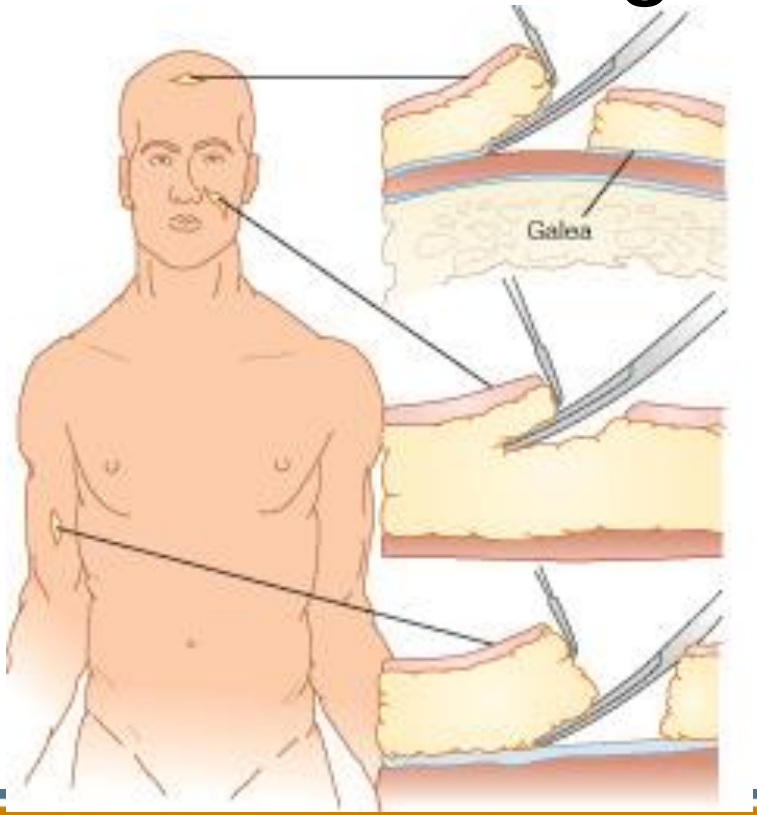




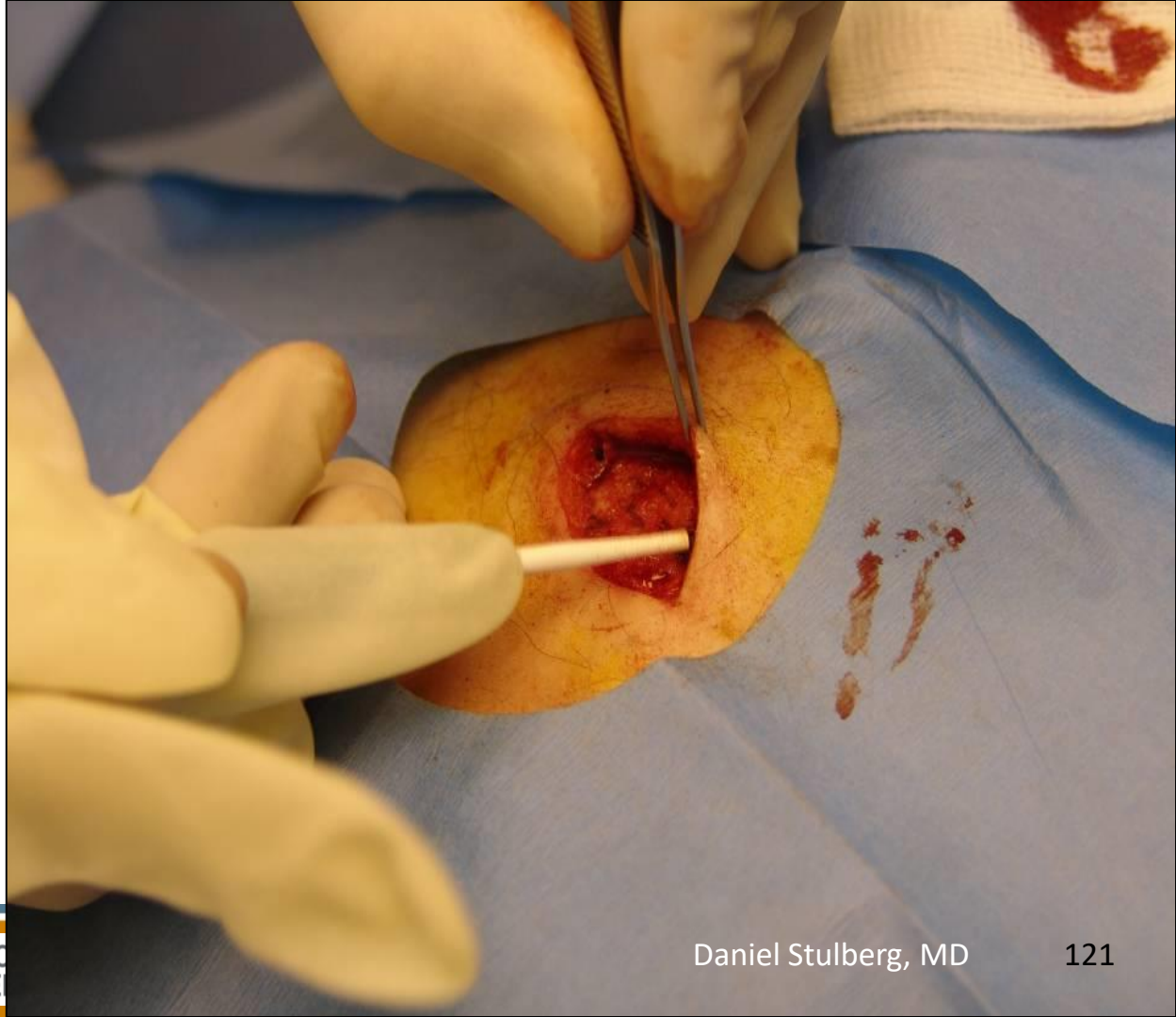




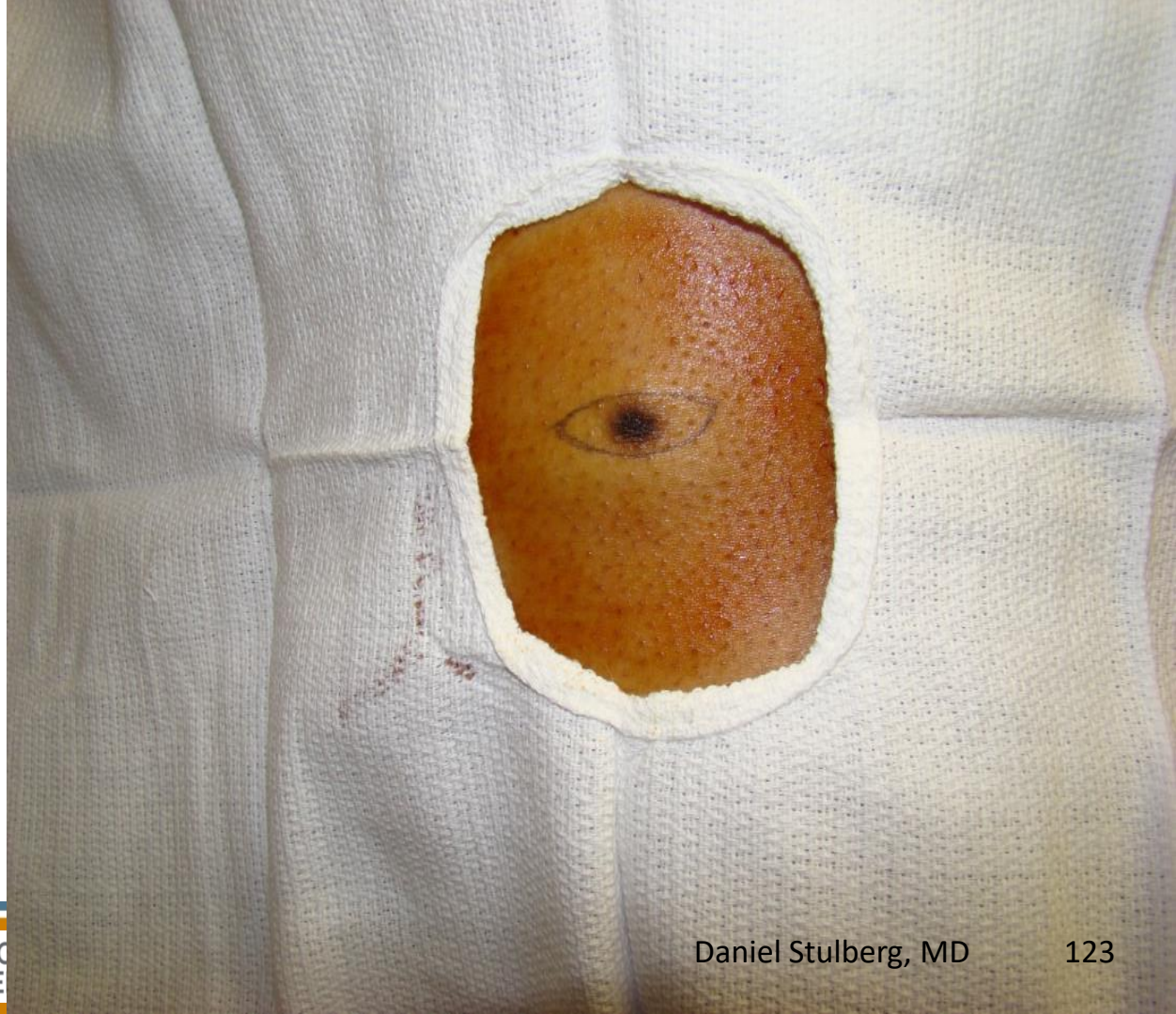
Undermining

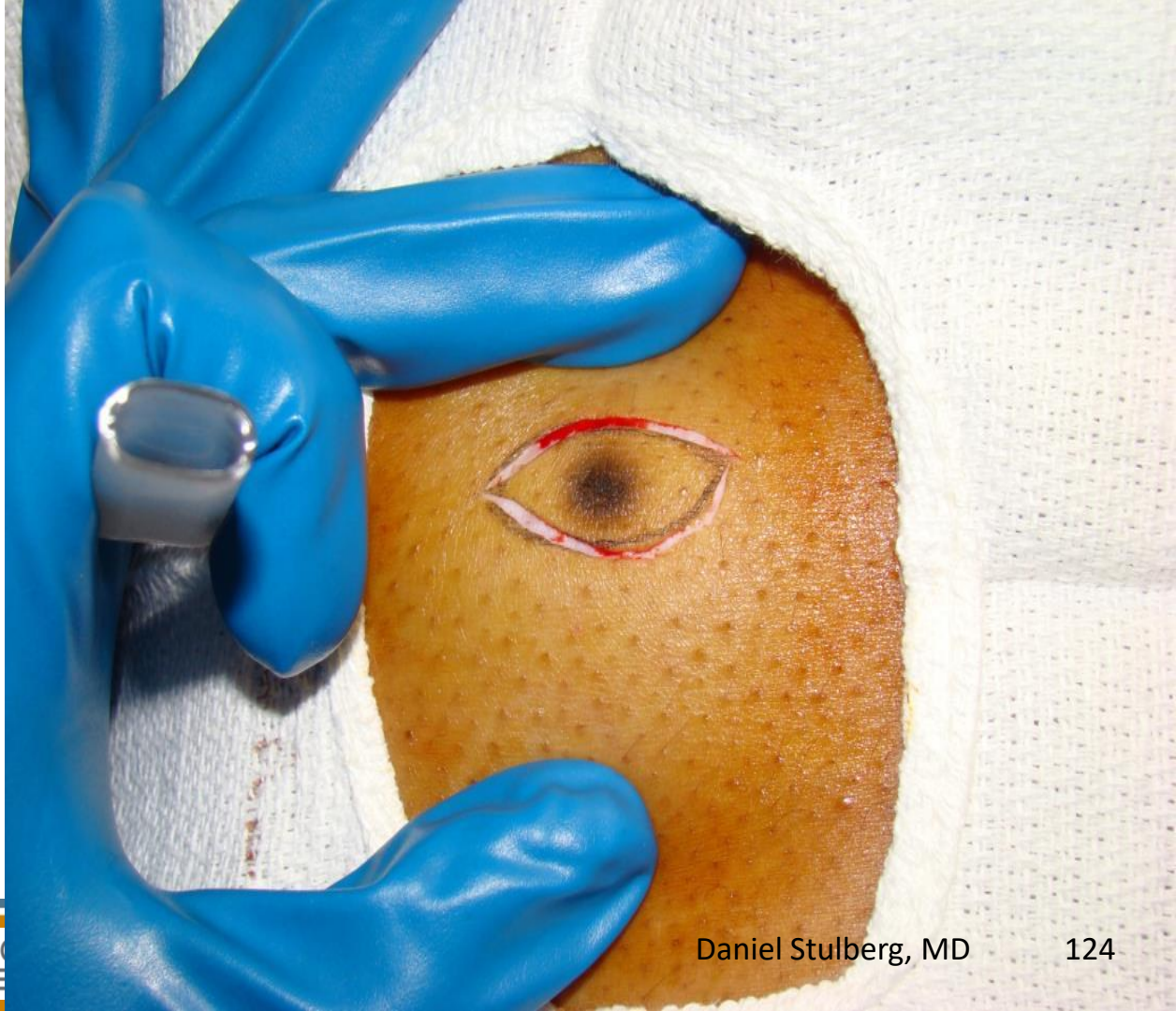


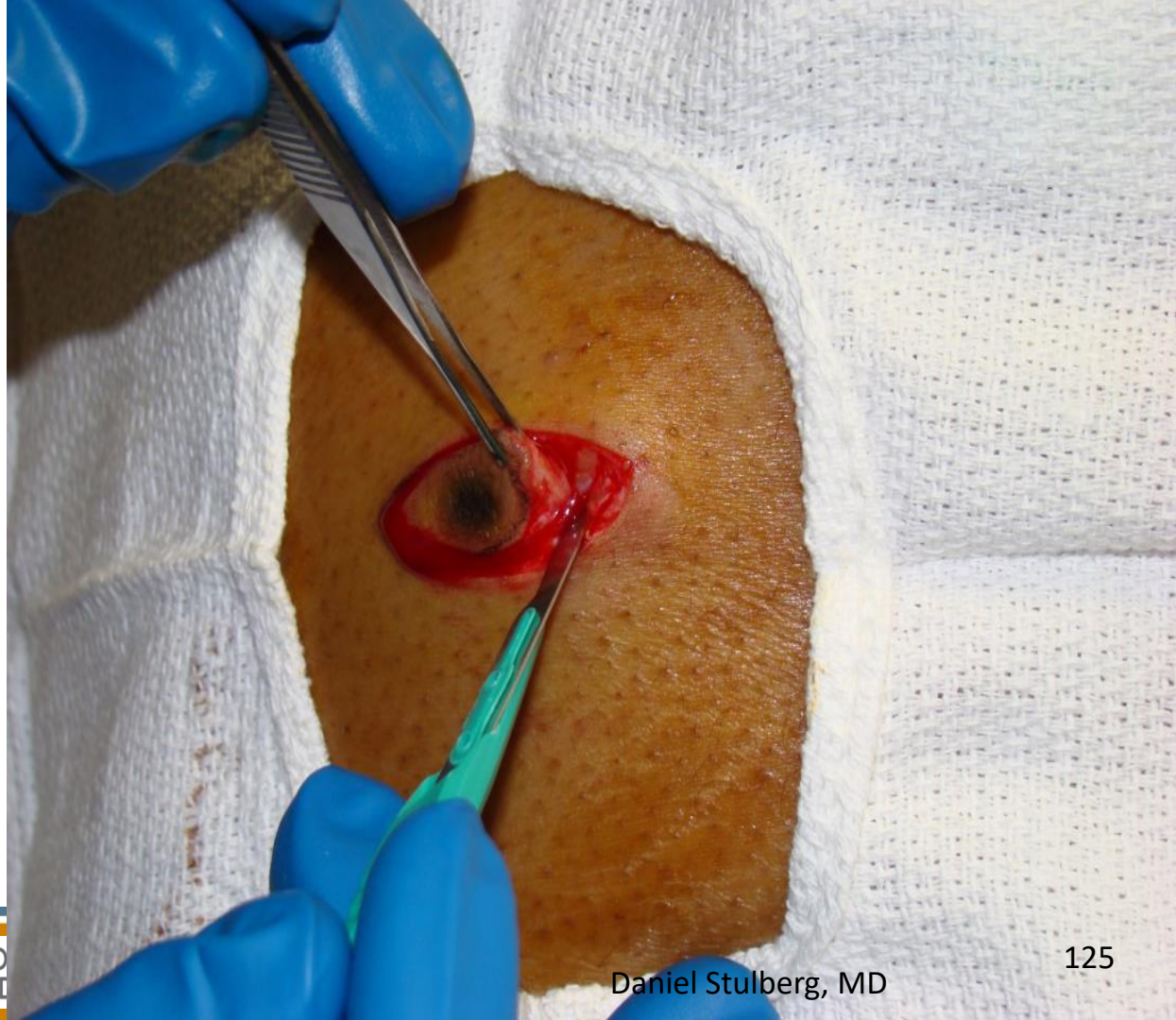
Courtesy of Dermatologic and Cosmetic Procedures in Office Practice



2:1 Undermine to Stretch







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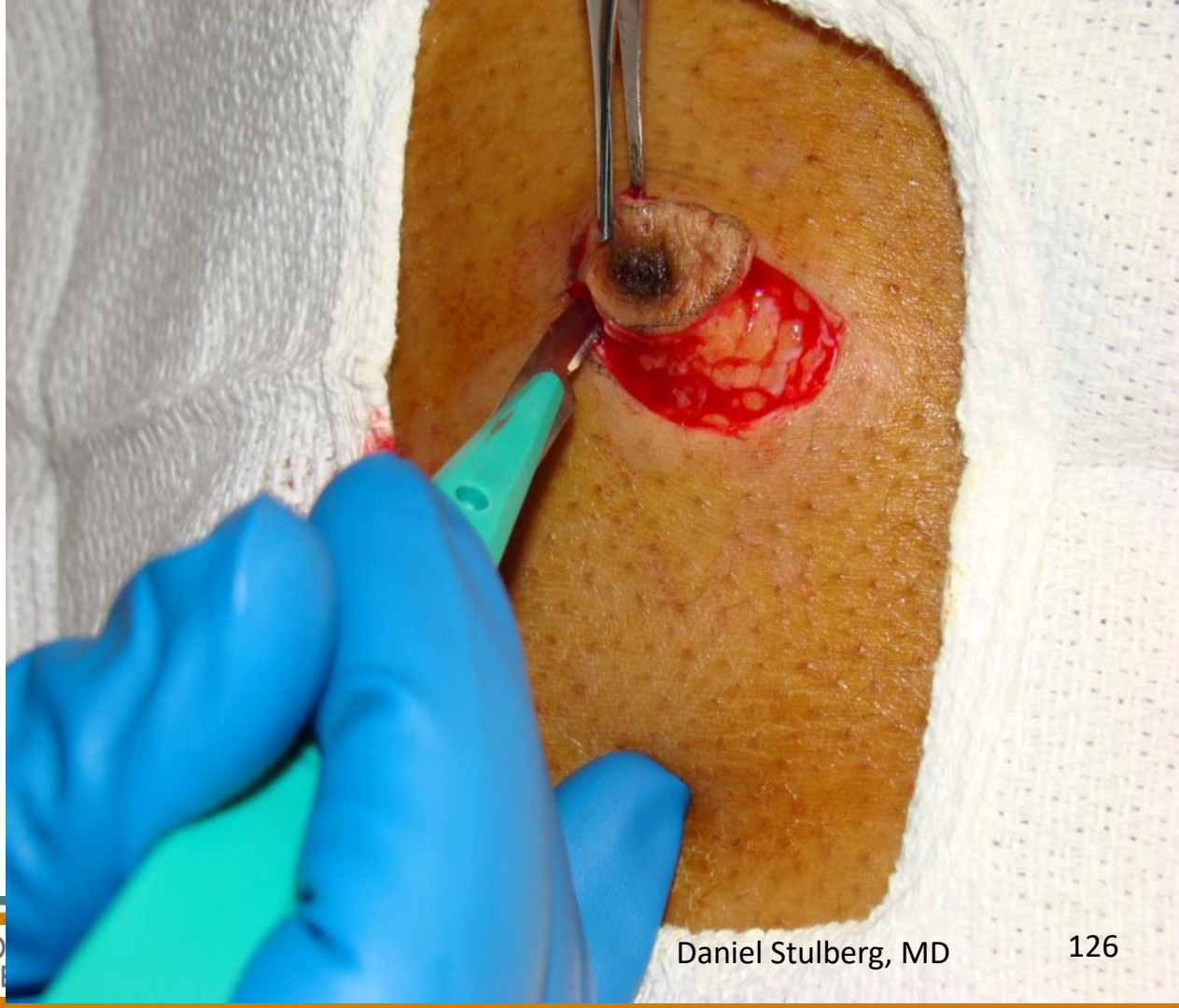

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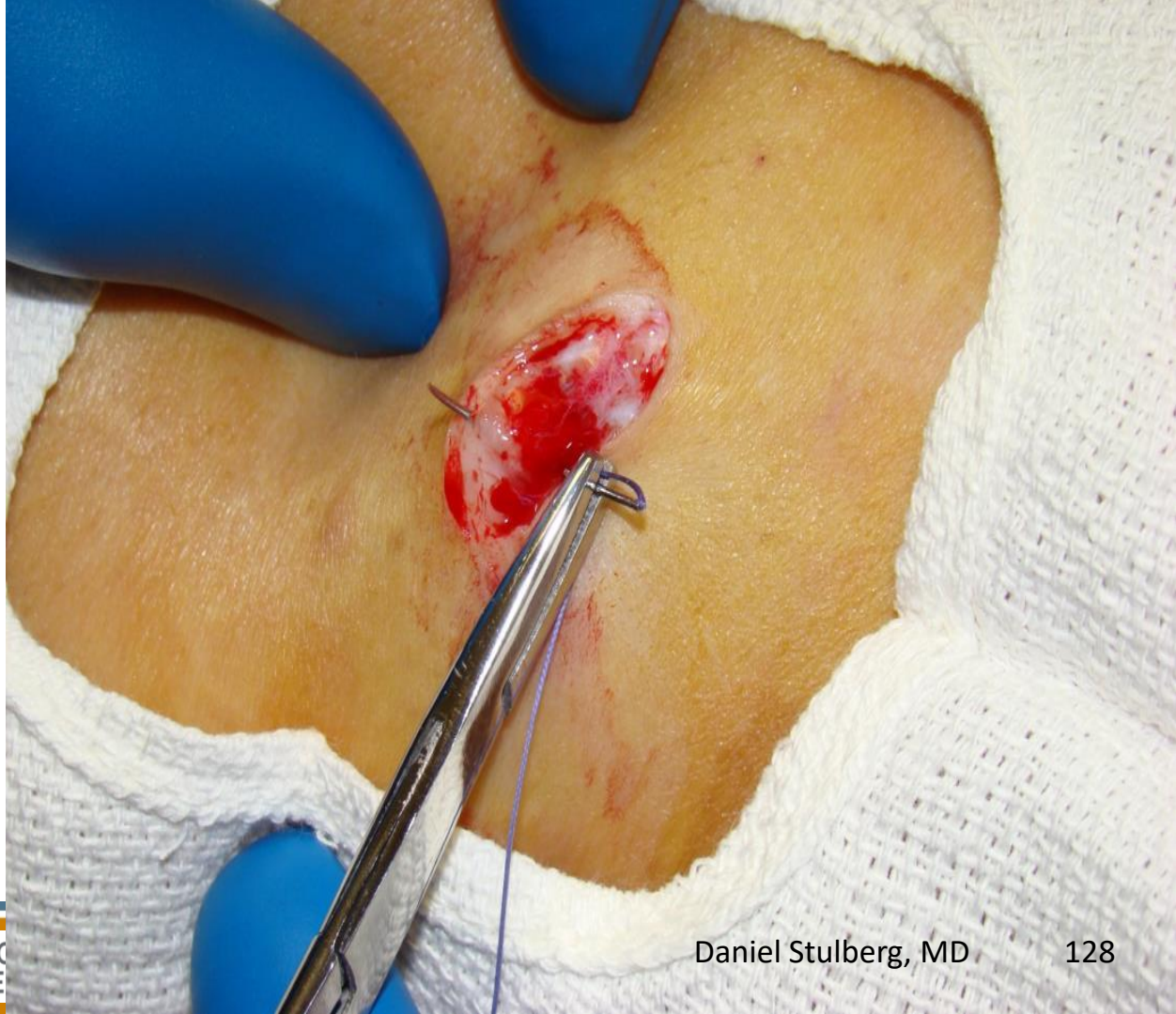
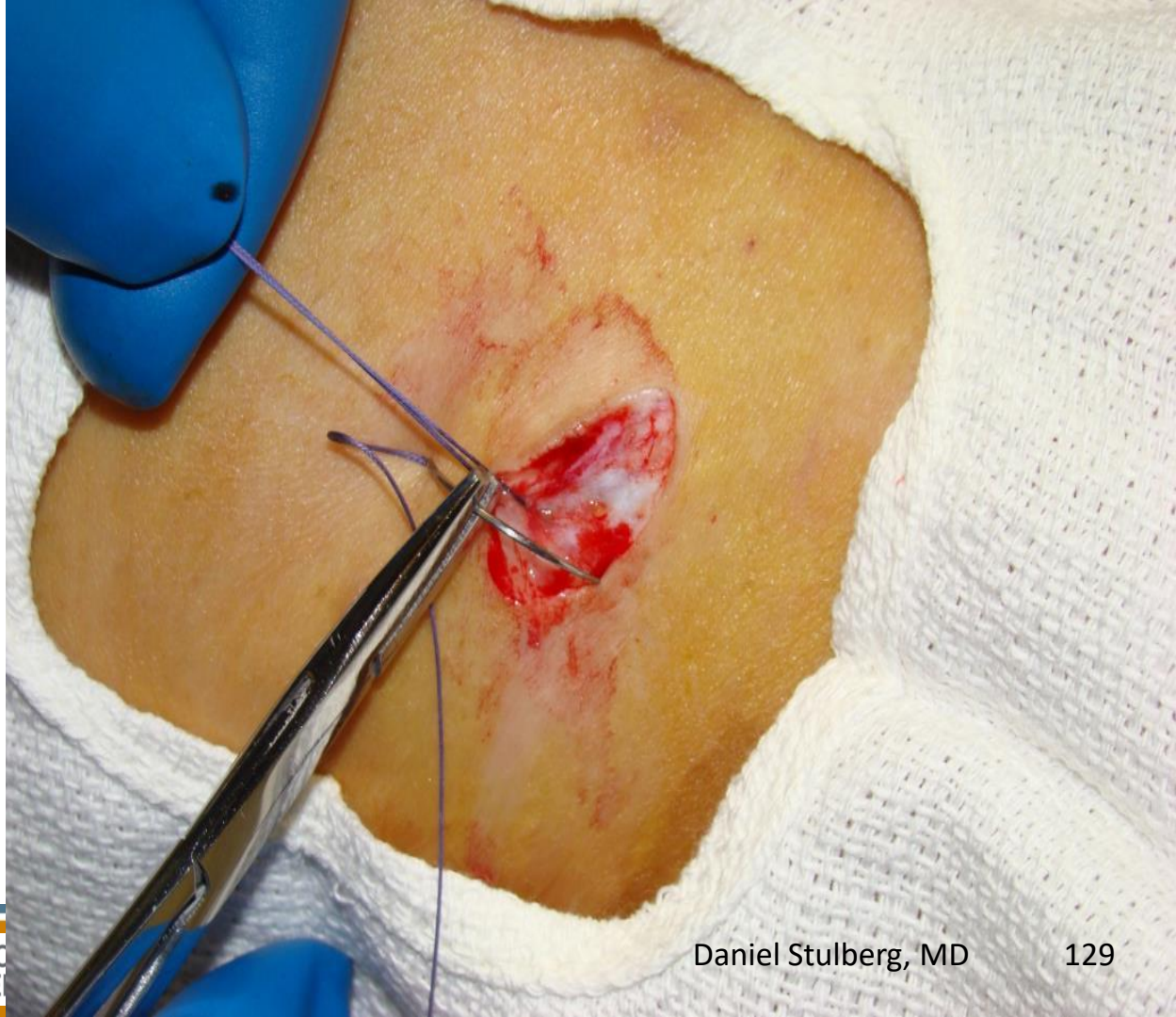
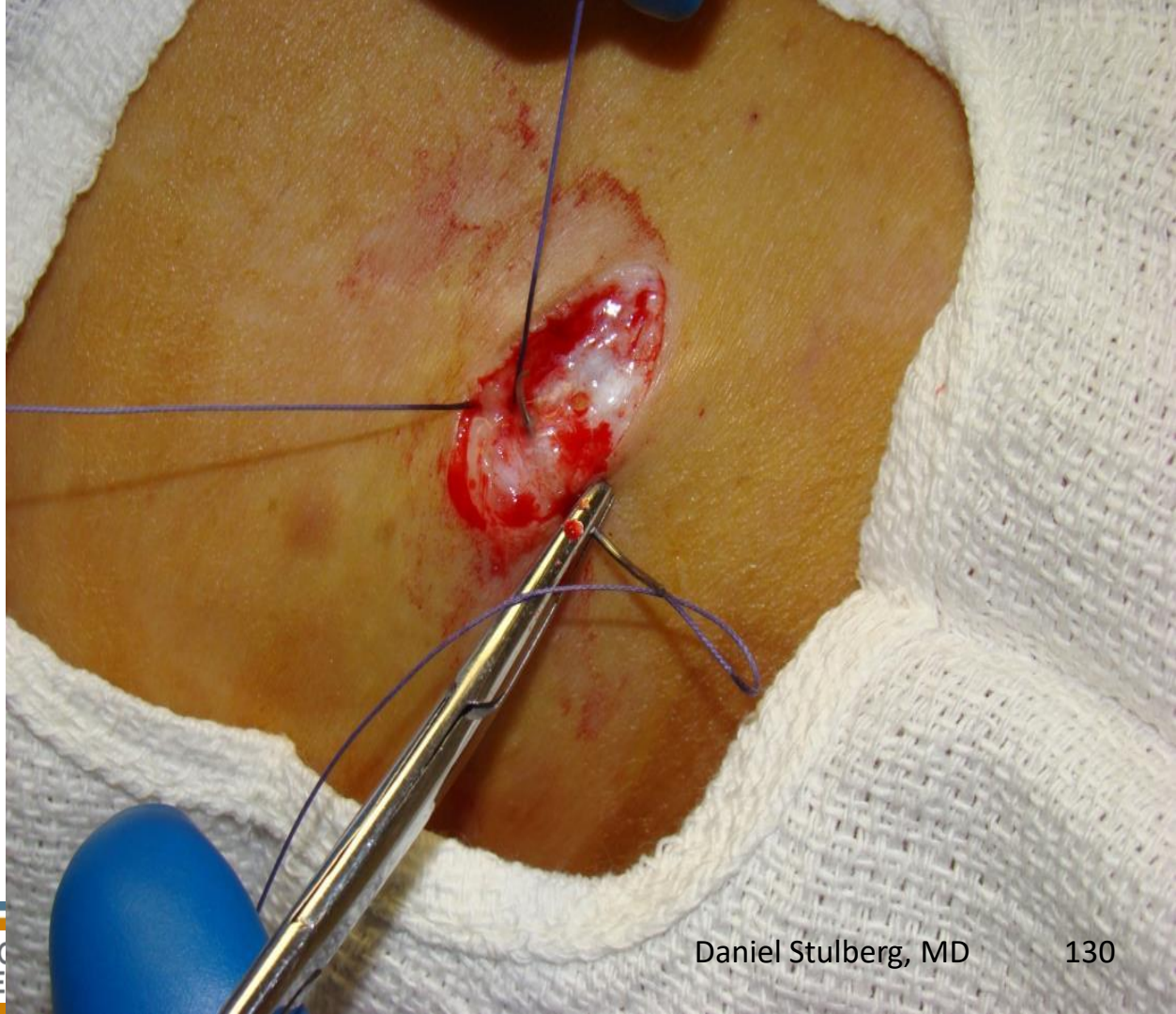
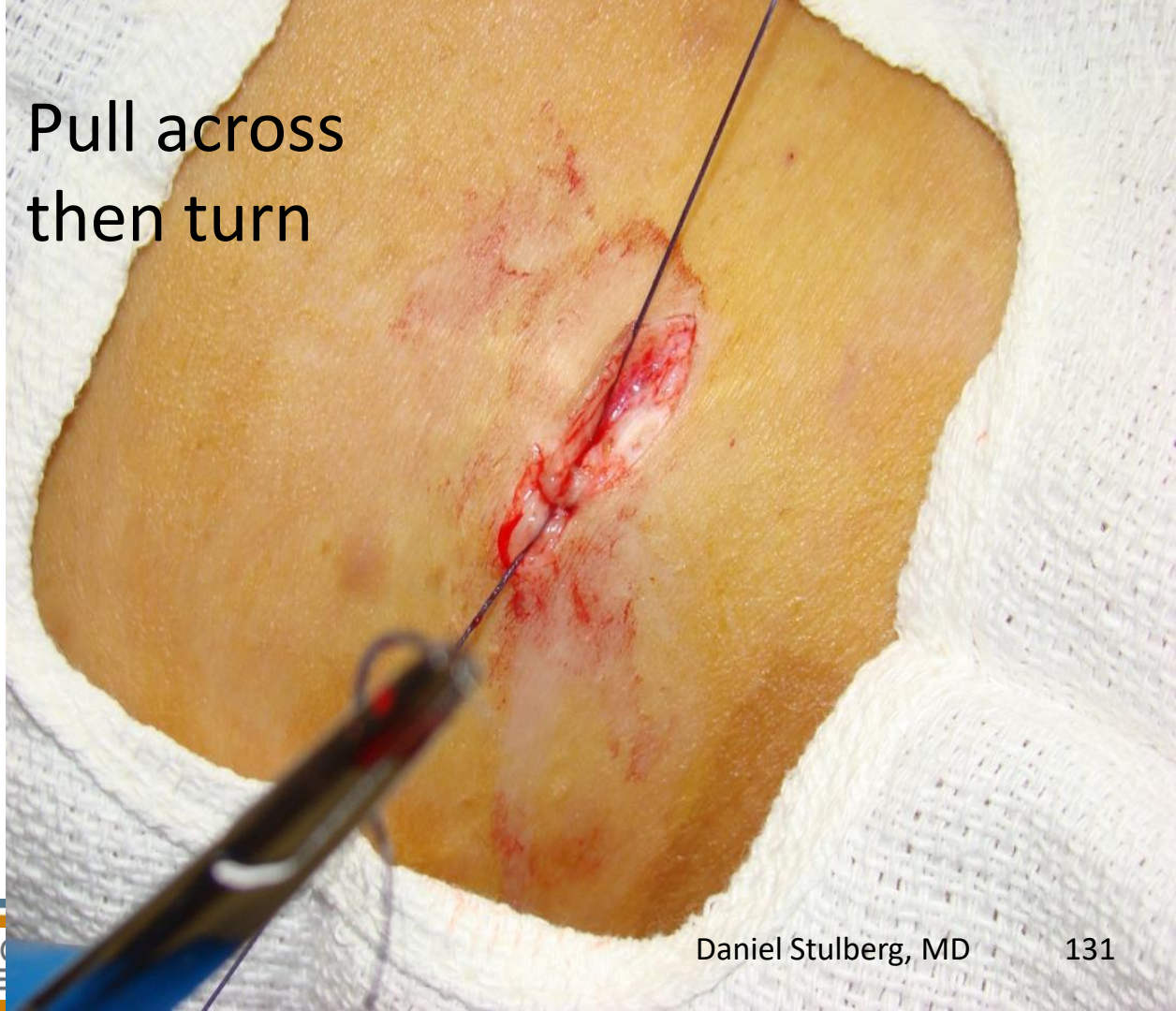
Review - Closing ellipses

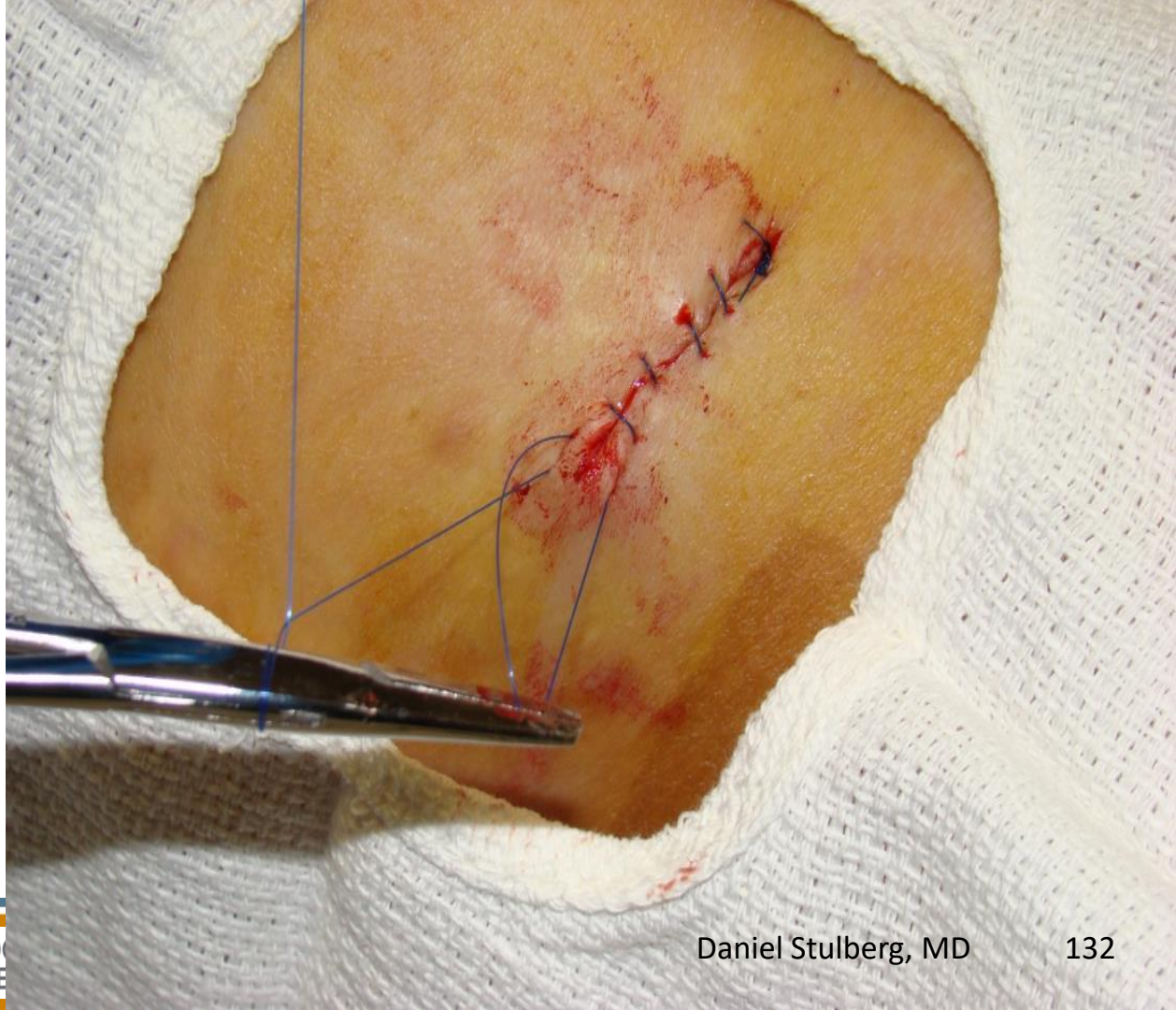
- Deep suture with inverted knots
- Running simple

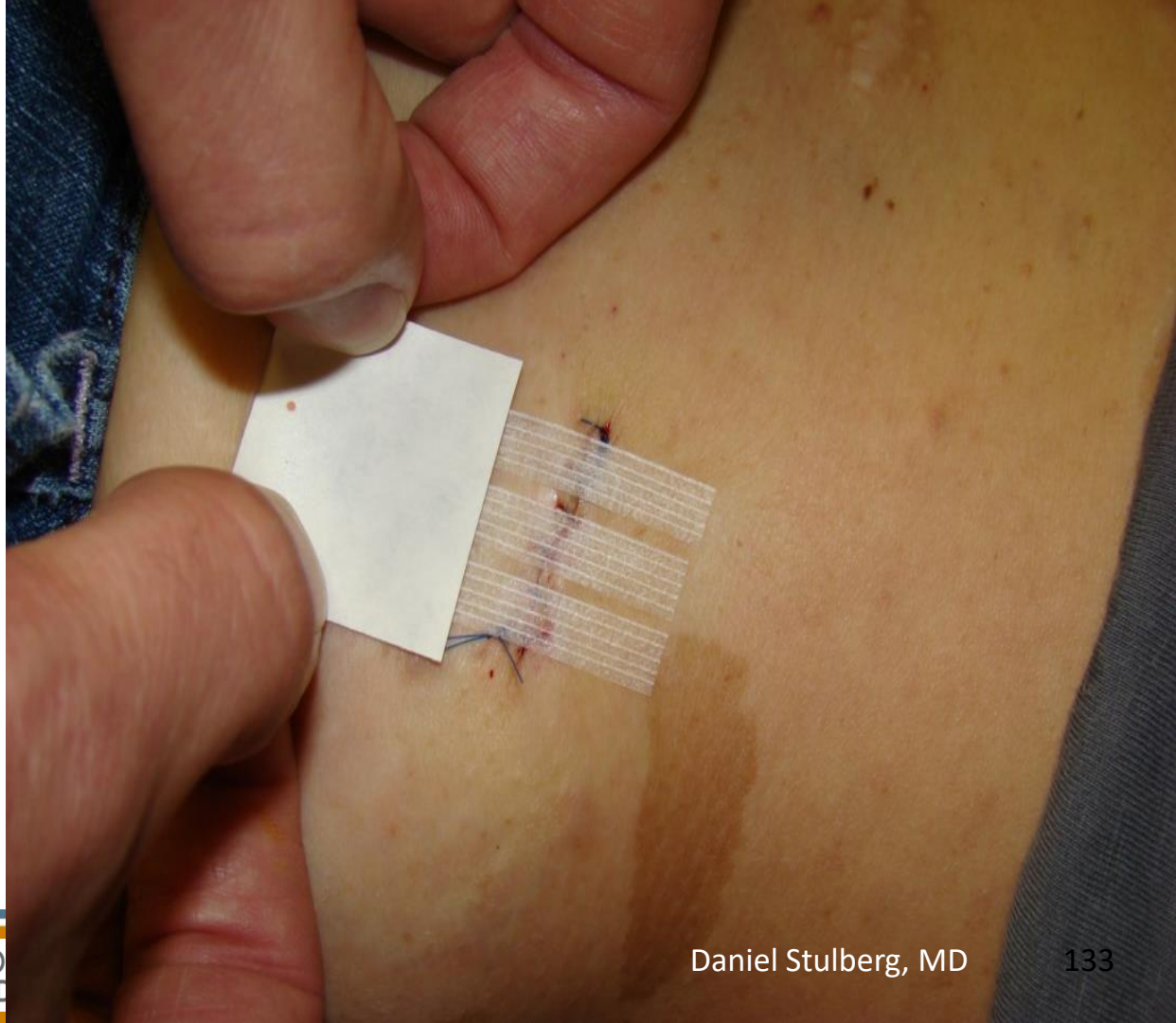







Pull across
then turn

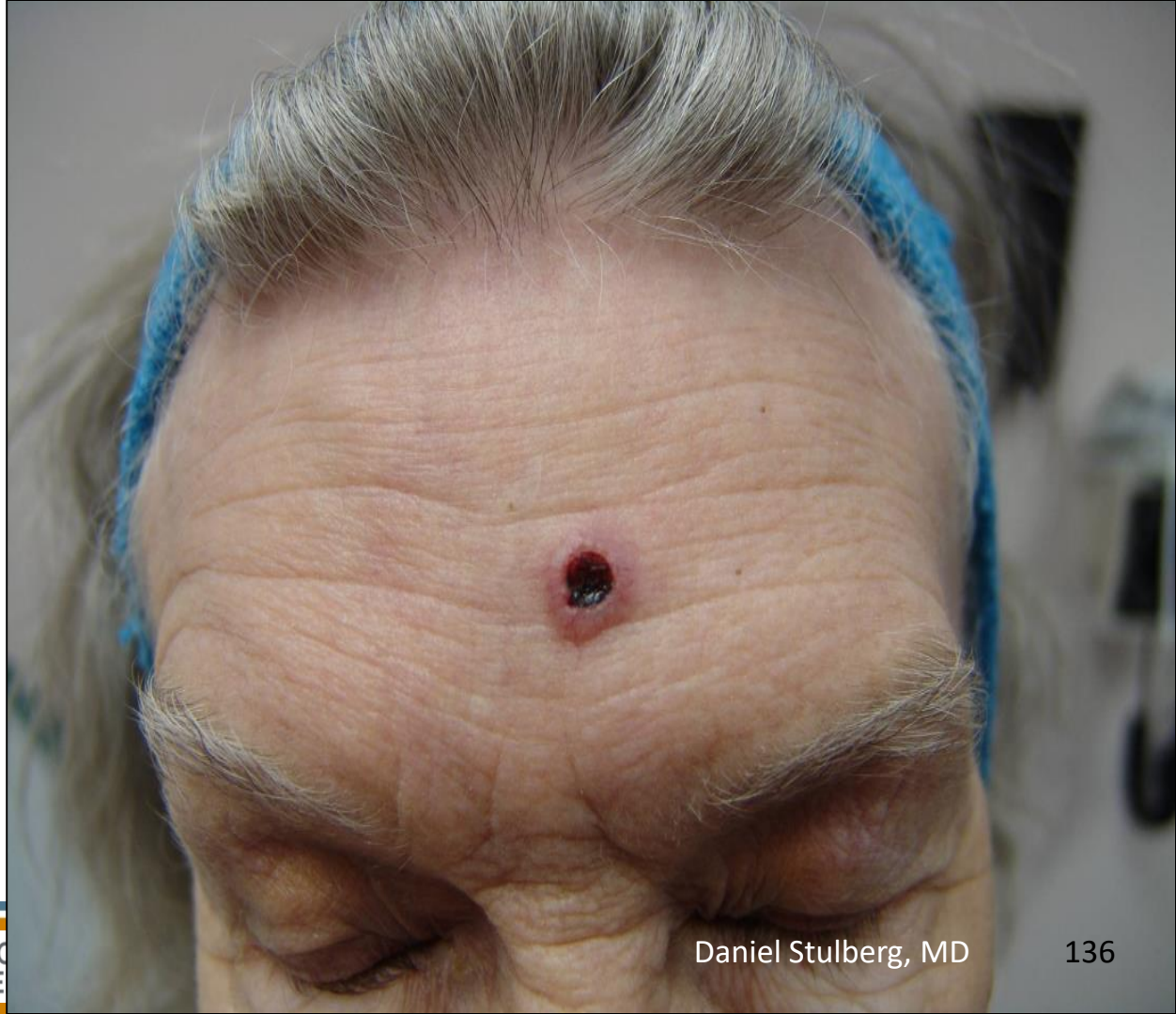




What technique to use?

Suspicious Lesion

- Tentative Diagnosis?
- What technique?



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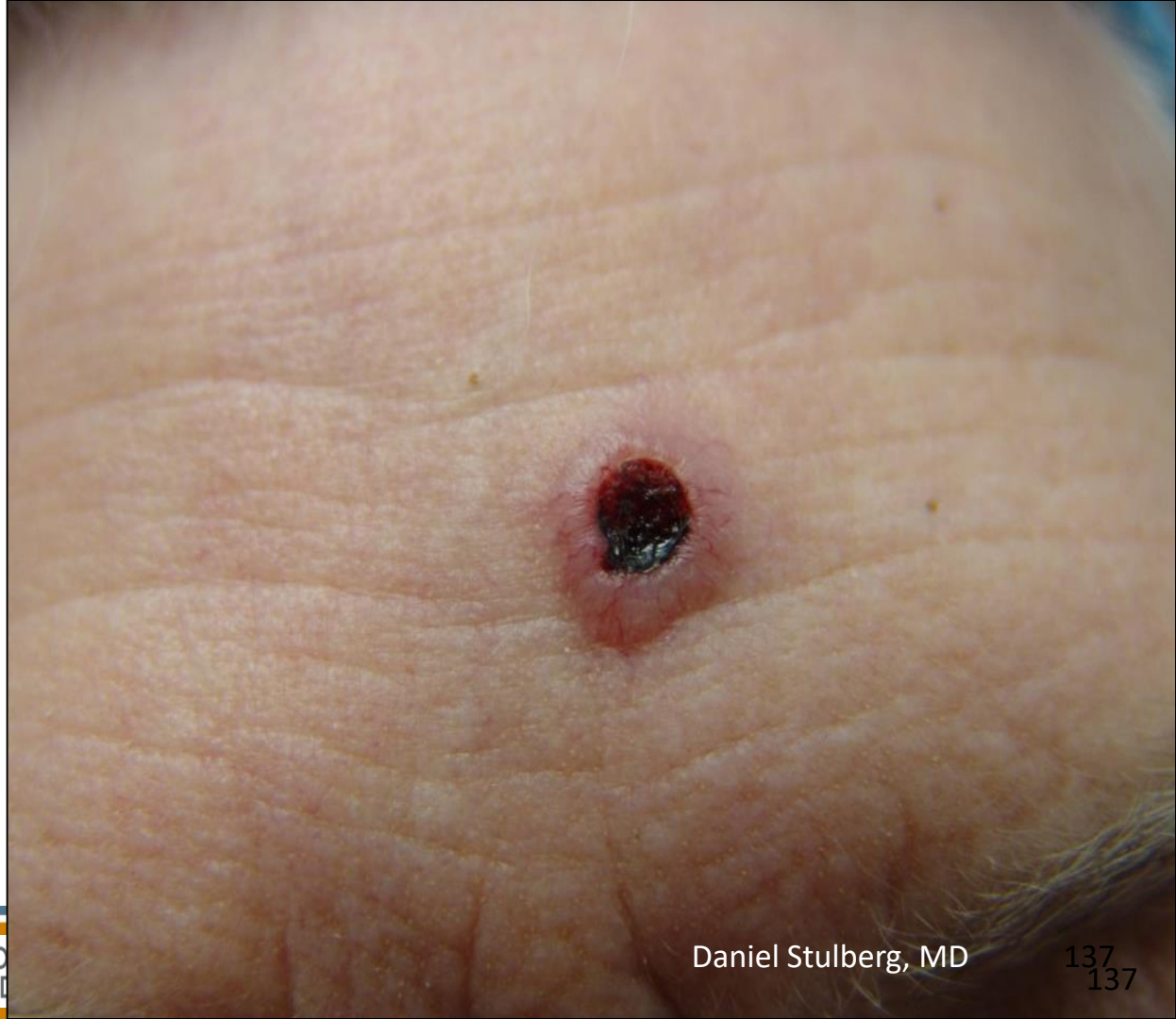

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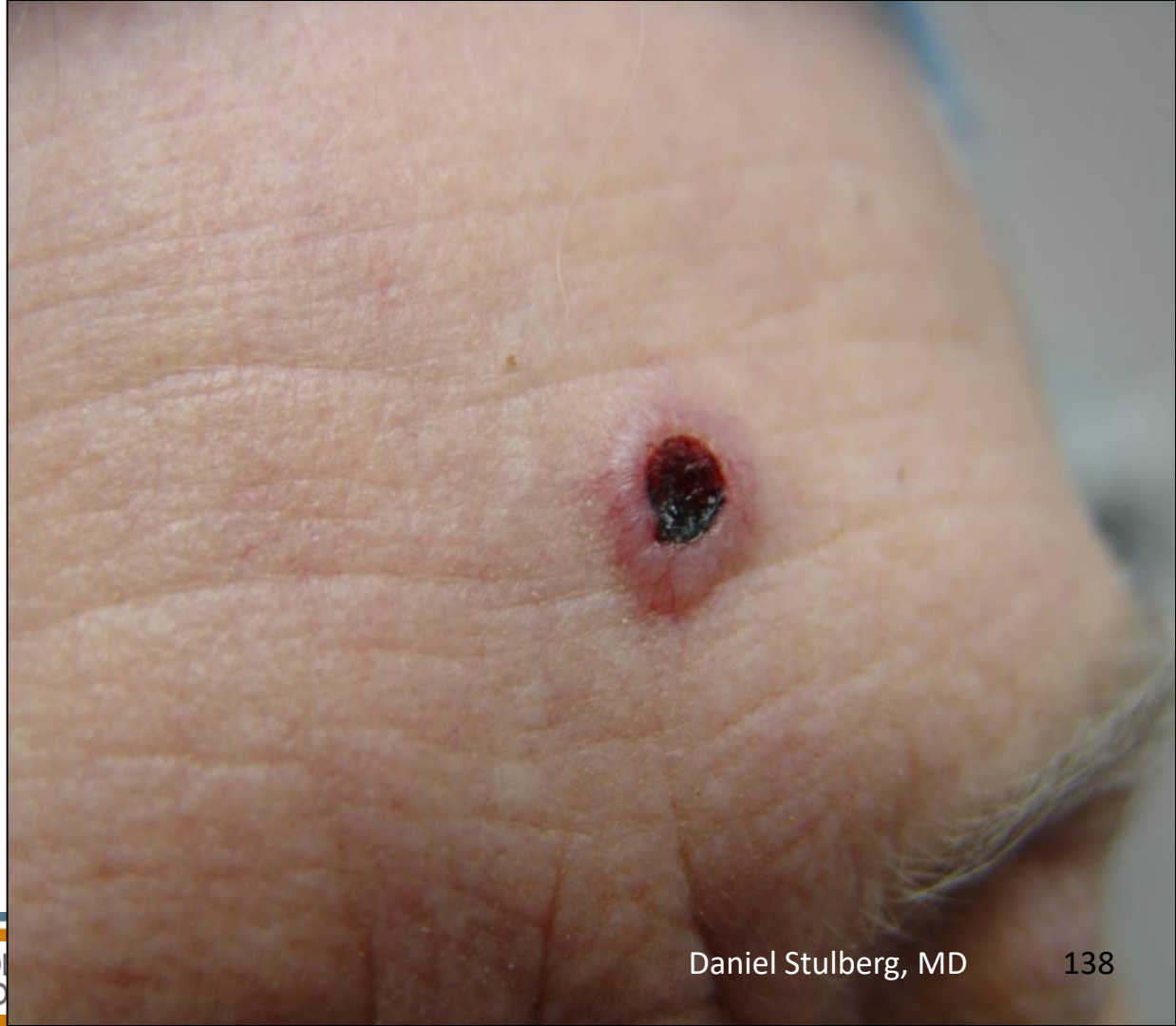

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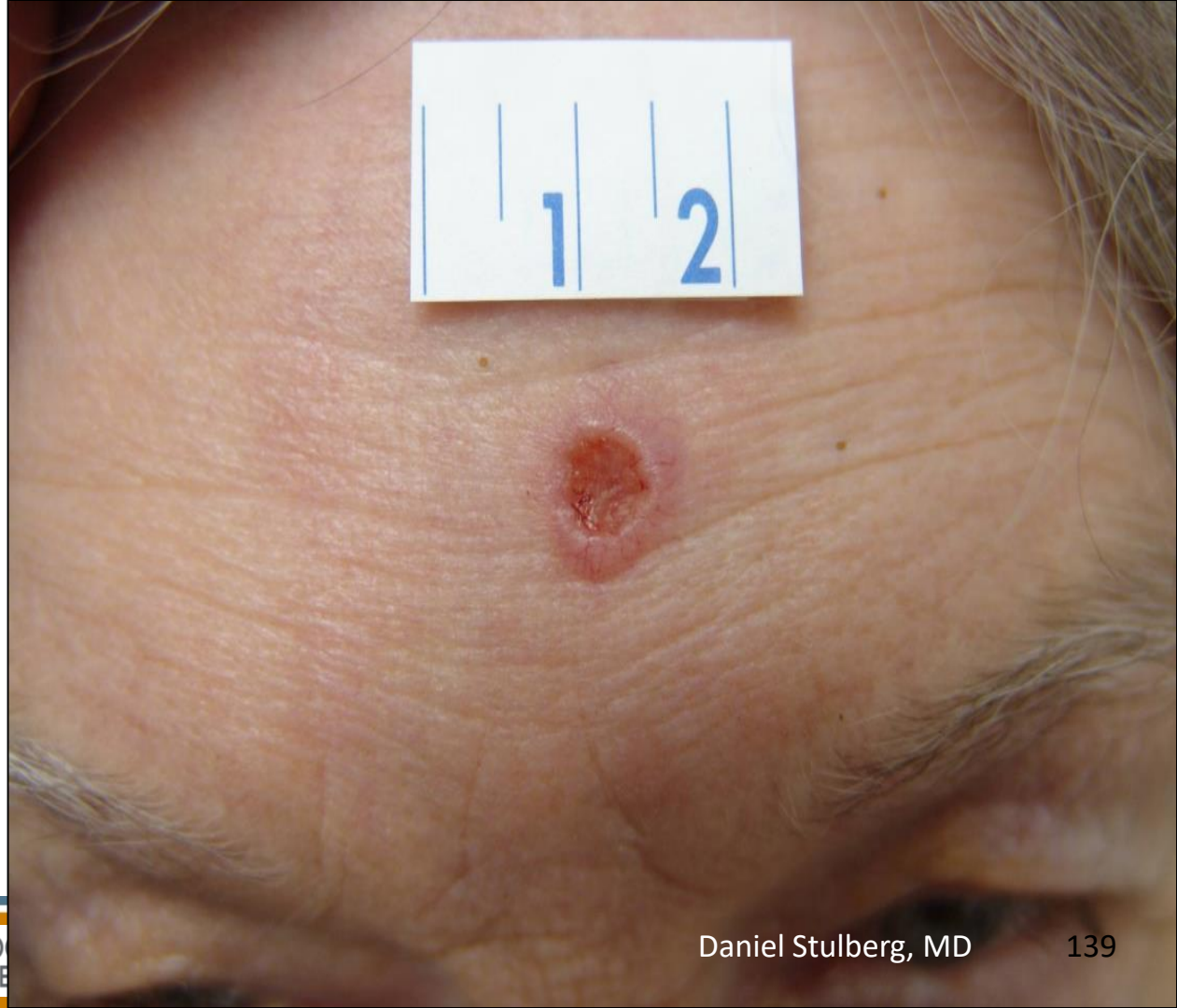
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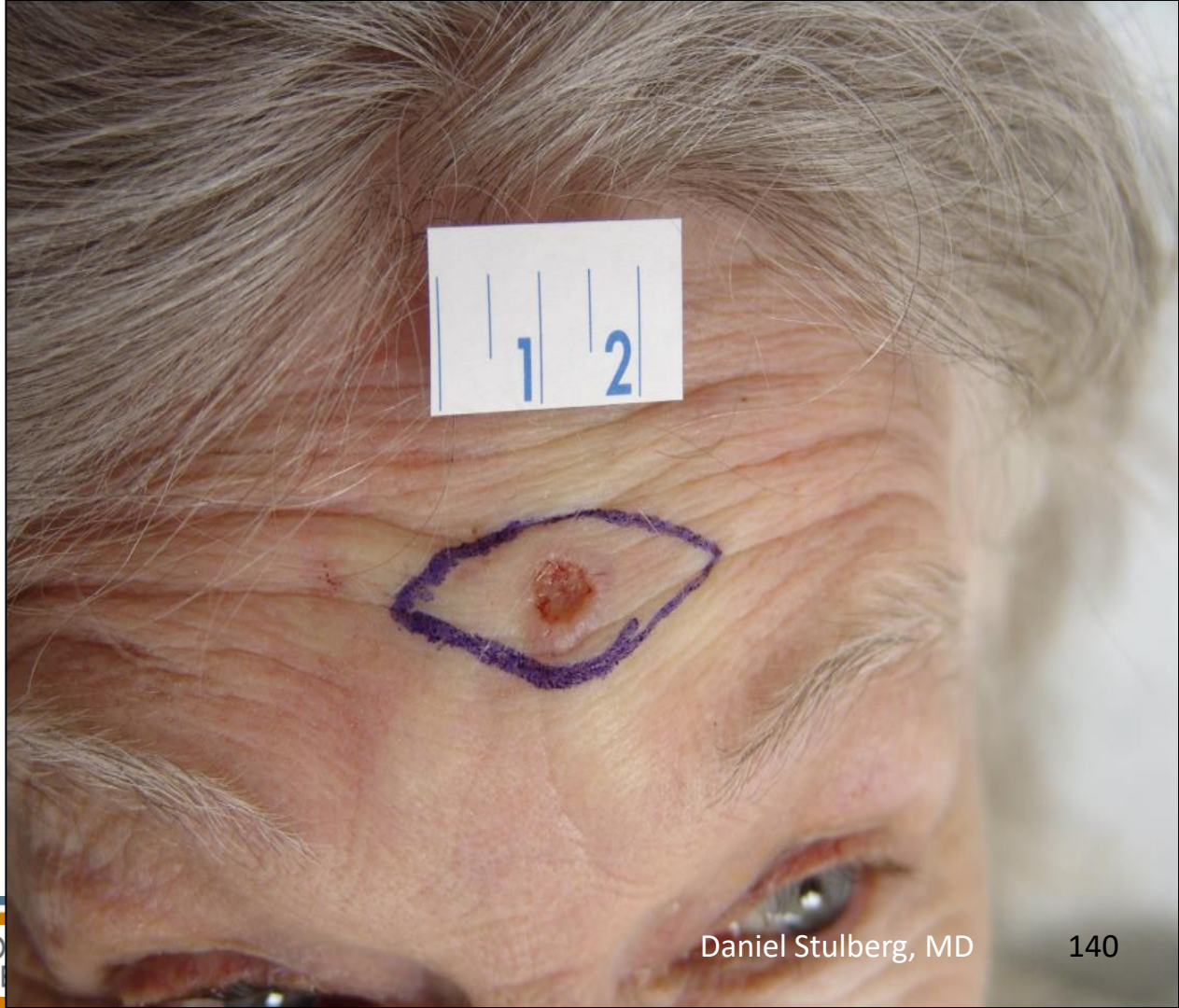
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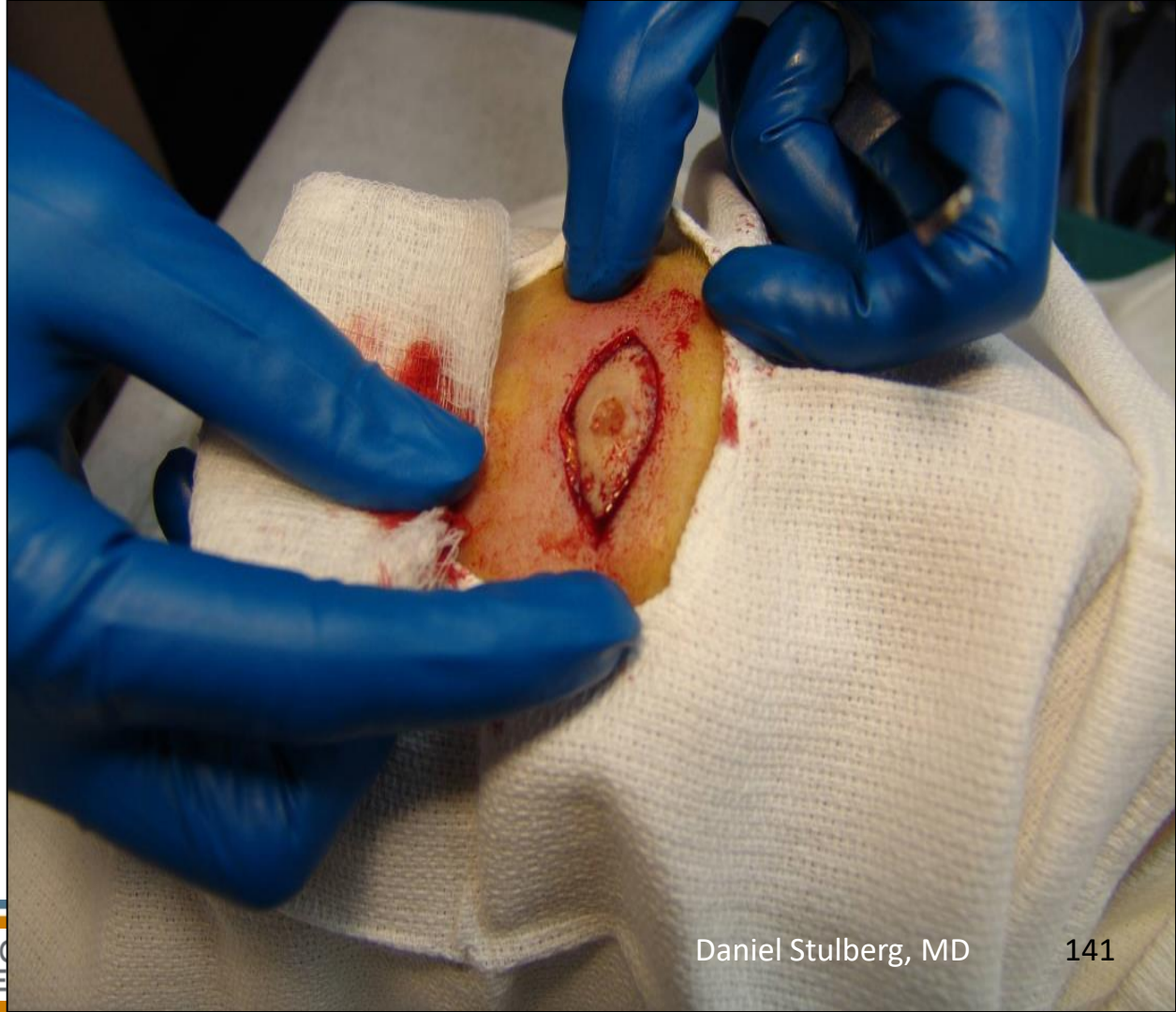
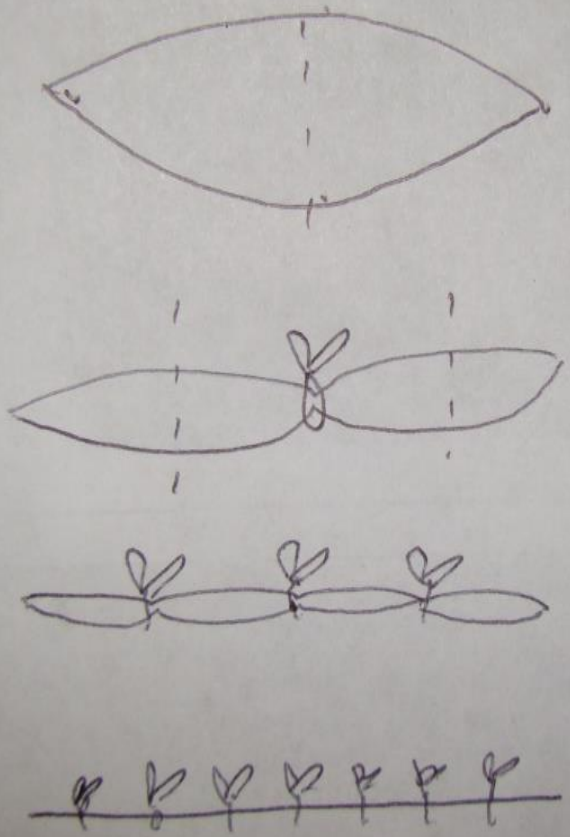


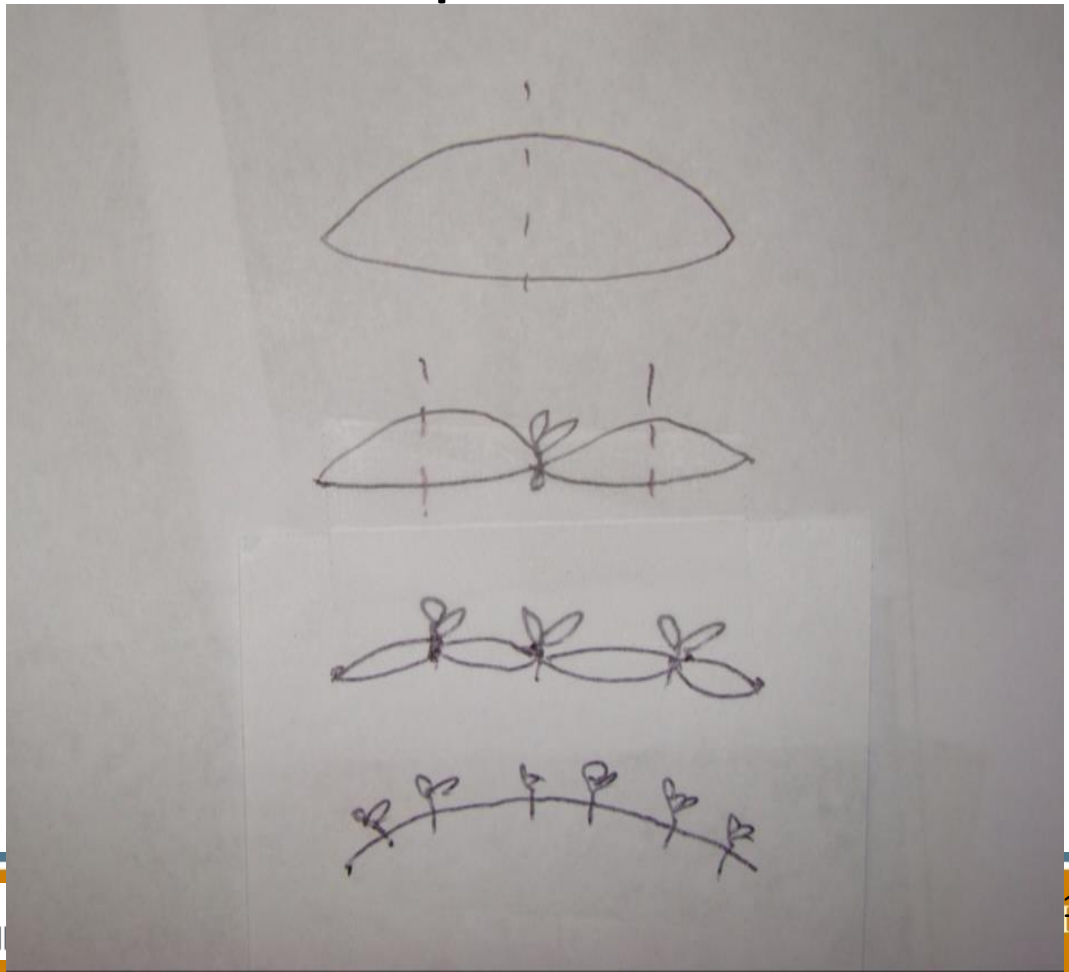
Avoiding dog ears

- Rule of halves
- Unequal sides

Rule of Halves



Unequal Sides



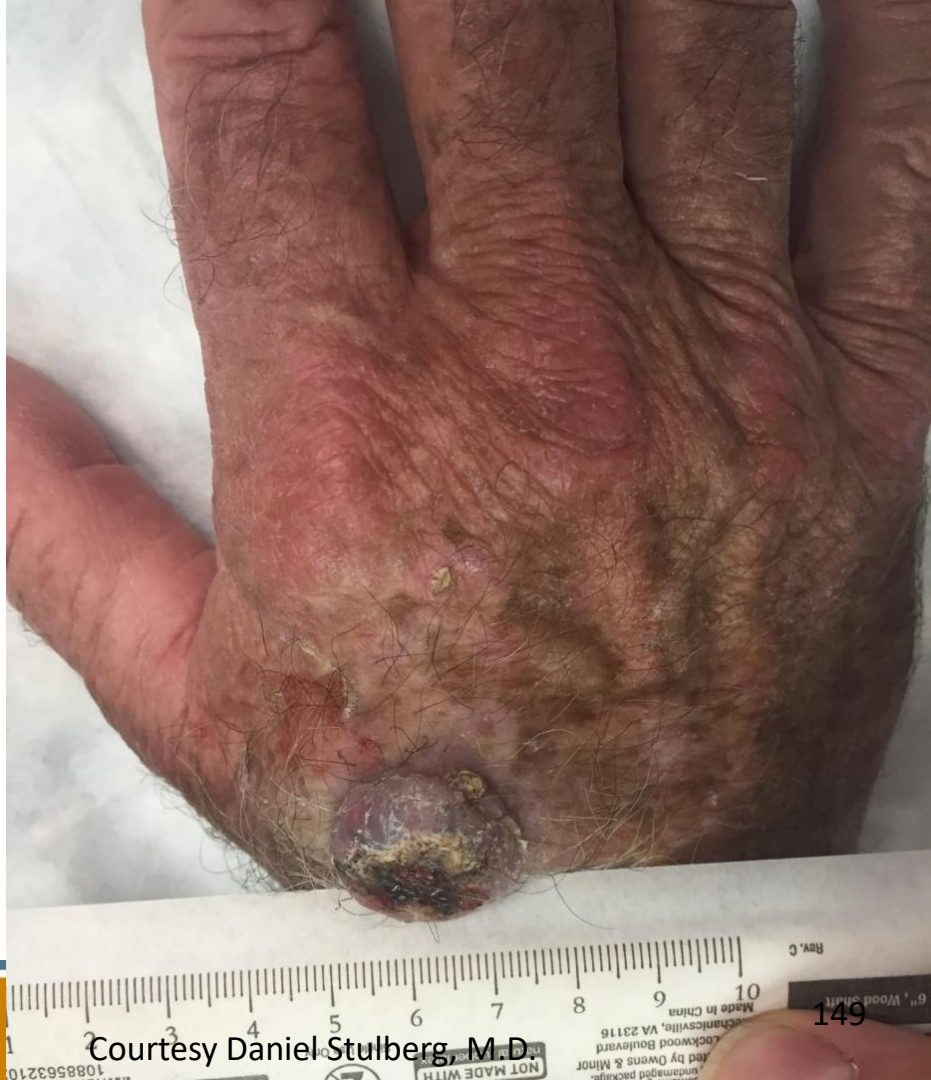
Large excisions

- Melanoma < 0.8mm
- Larger NMSC
- Inconvenient location

- ? Flaps
- ? Purse string

Purse String Suture Repair

SCC positive deep margin

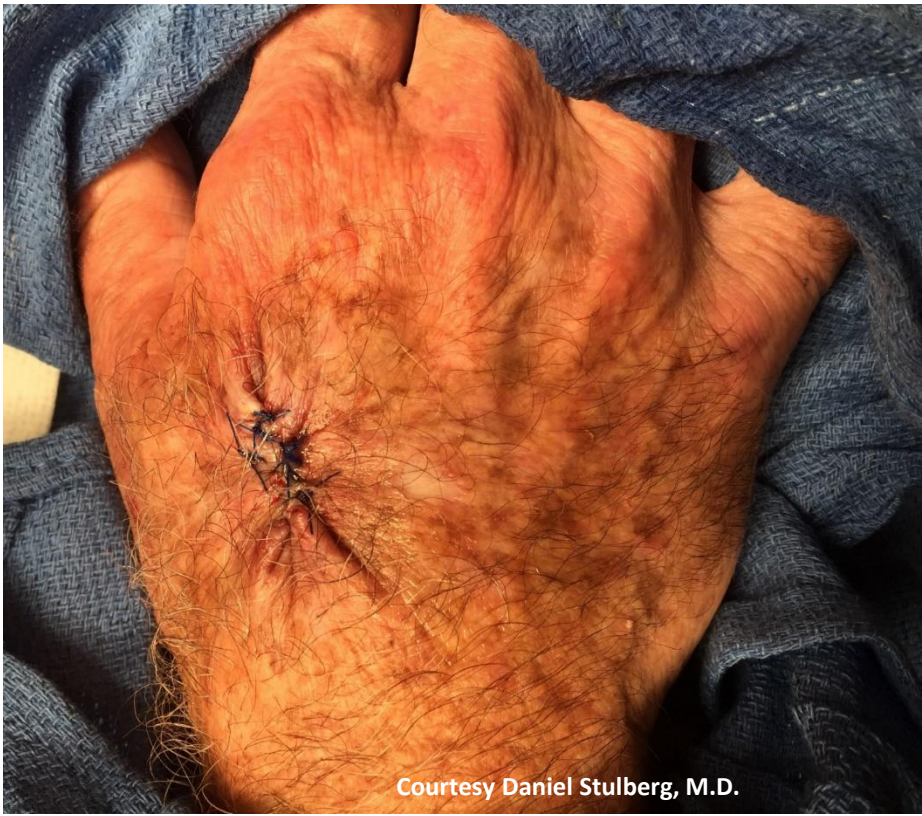


Courtesy Daniel Stulberg, M.D.

Excision with margins

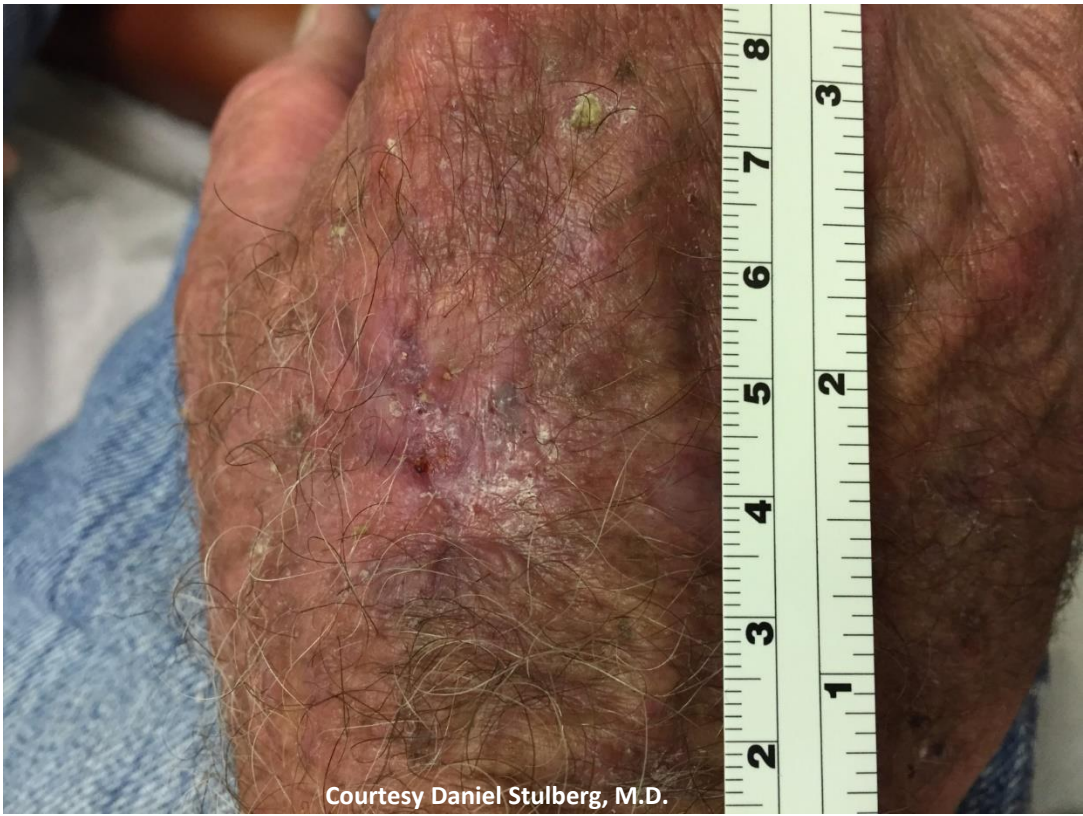
Purse string to ellipse

Vertical mattress and 2 interrupted simple

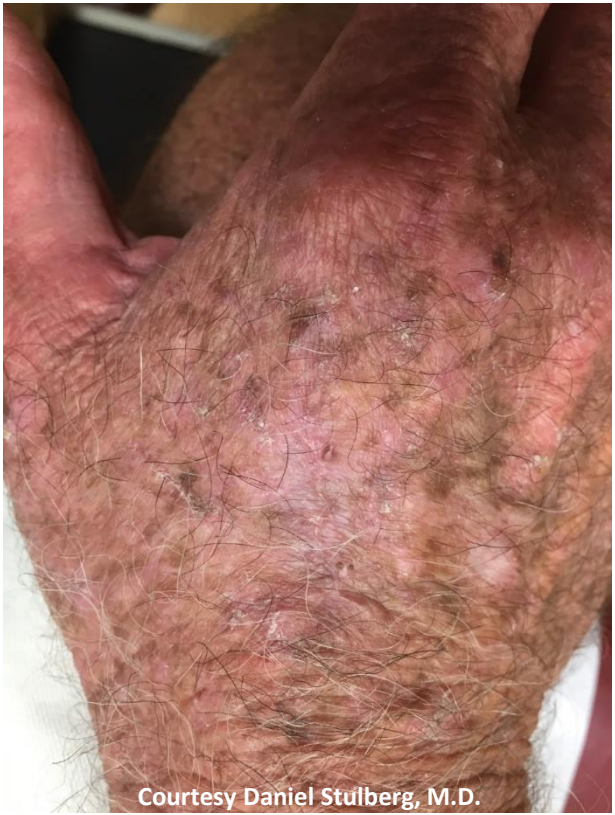


How does this look in the long run?

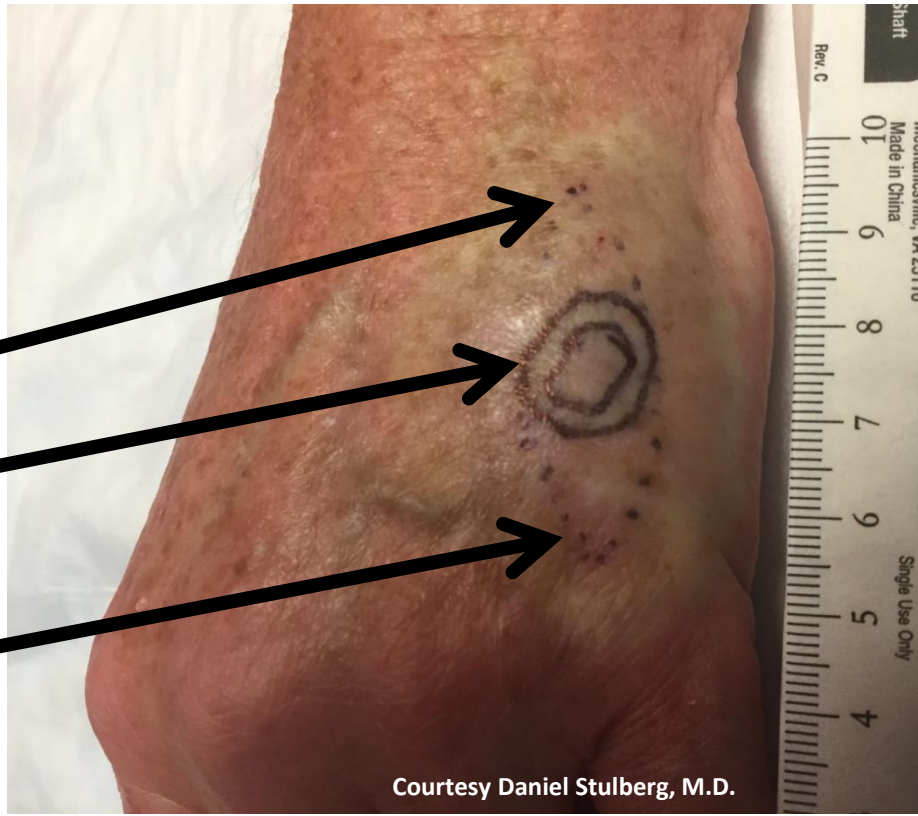
8 weeks post op



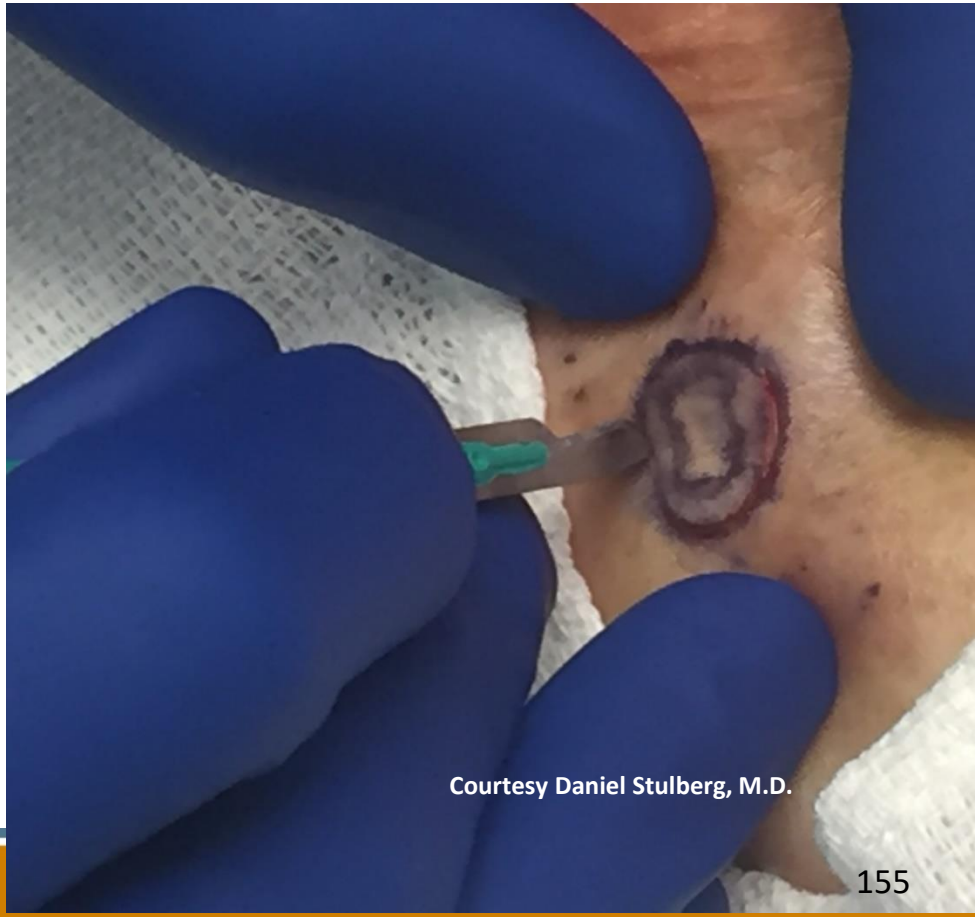
10 months post op



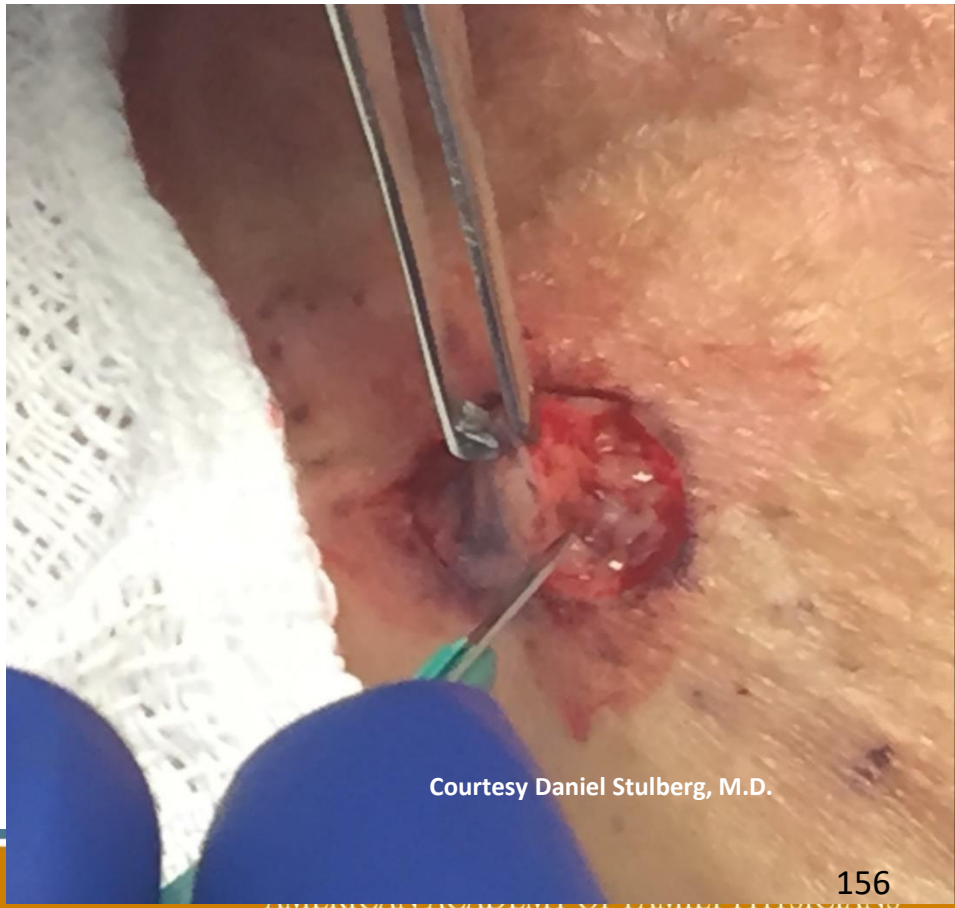
Actinic horn- Shave of base = SCC



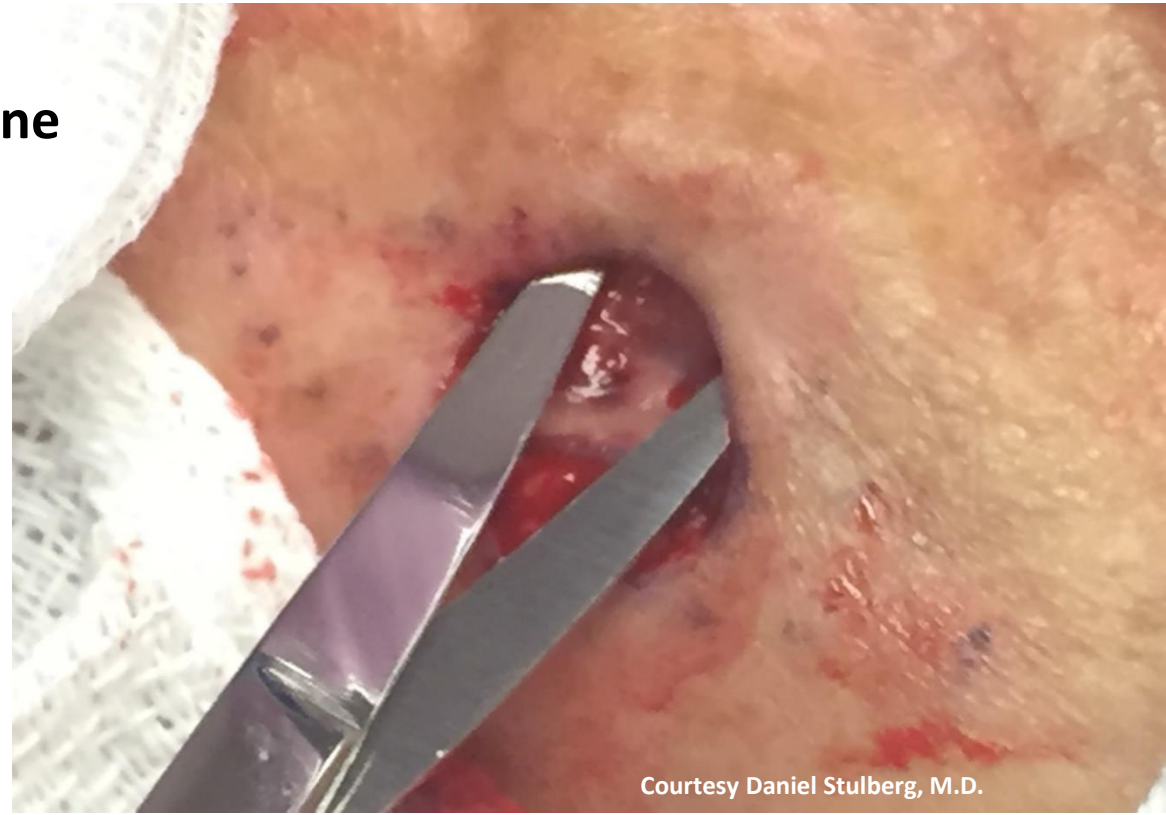
Incise circumference



Remove sample

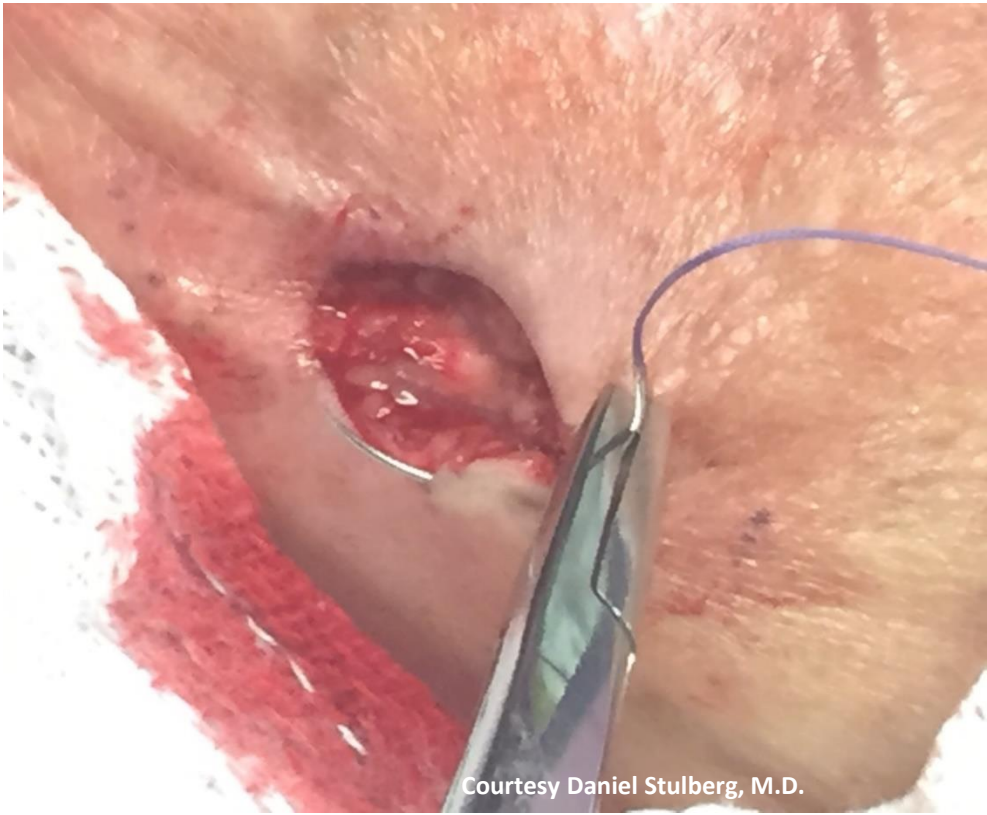


Widely undermine wound margins

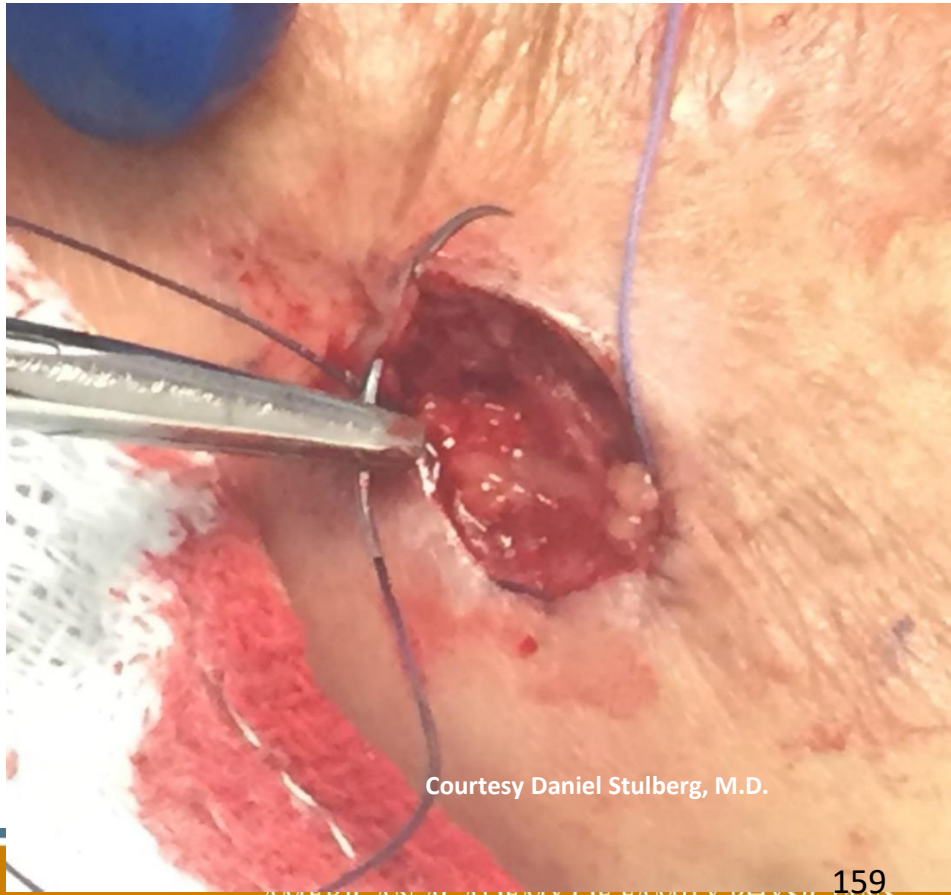


Courtesy Daniel Stulberg, M.D.

Serpentine dermal suture 2-0 Vicryl

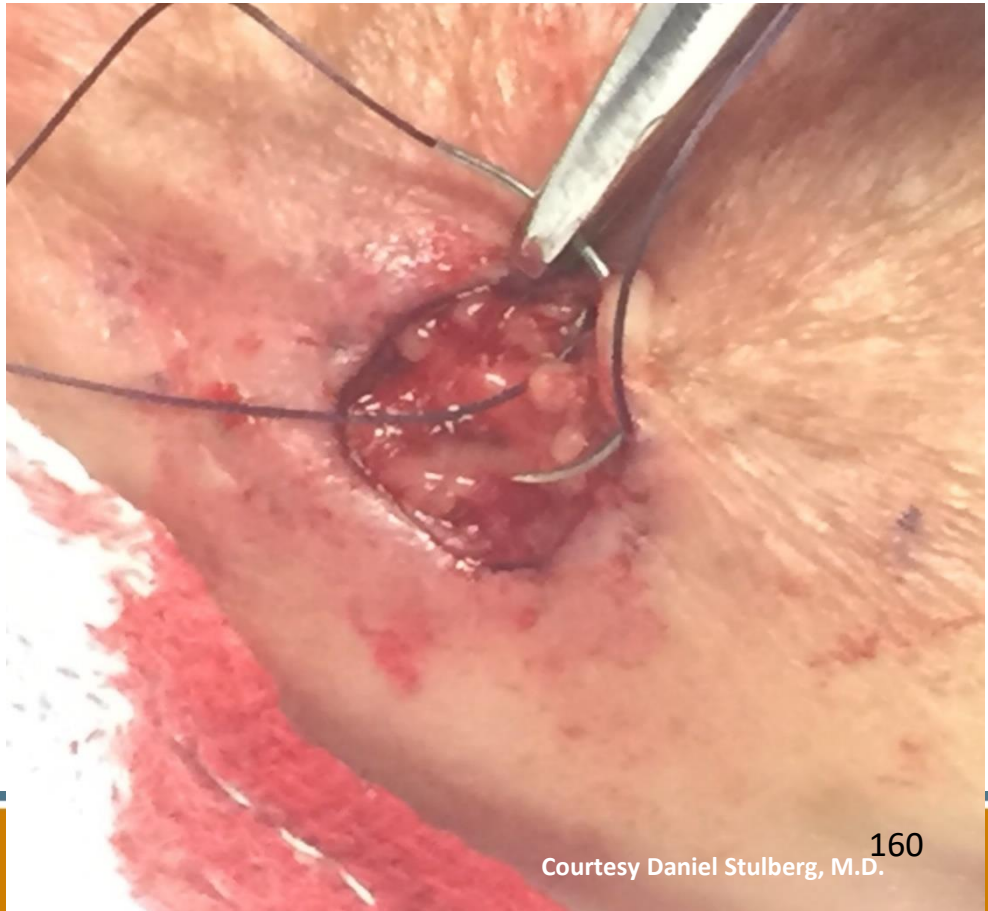


Leave space between needle exit and entry



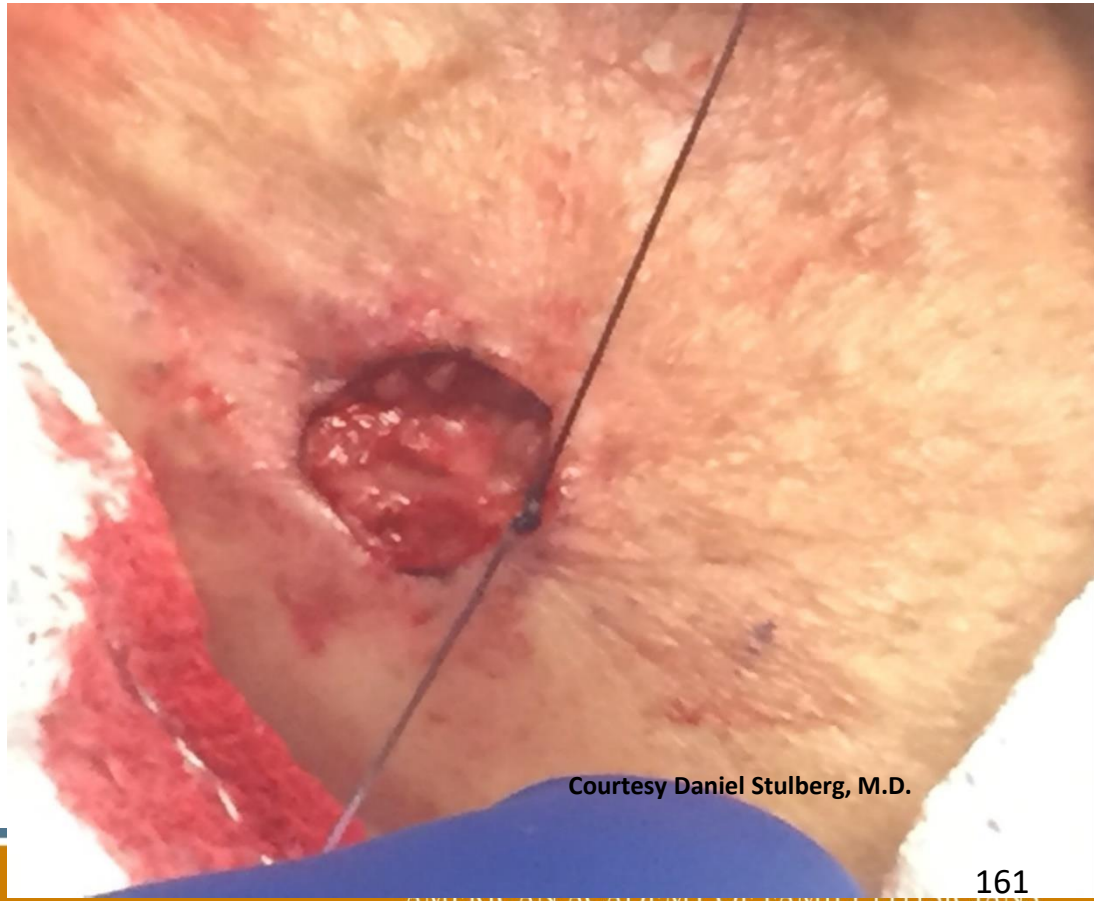
Courtesy Daniel Stulberg, M.D.

Completing circum-ferential stitching



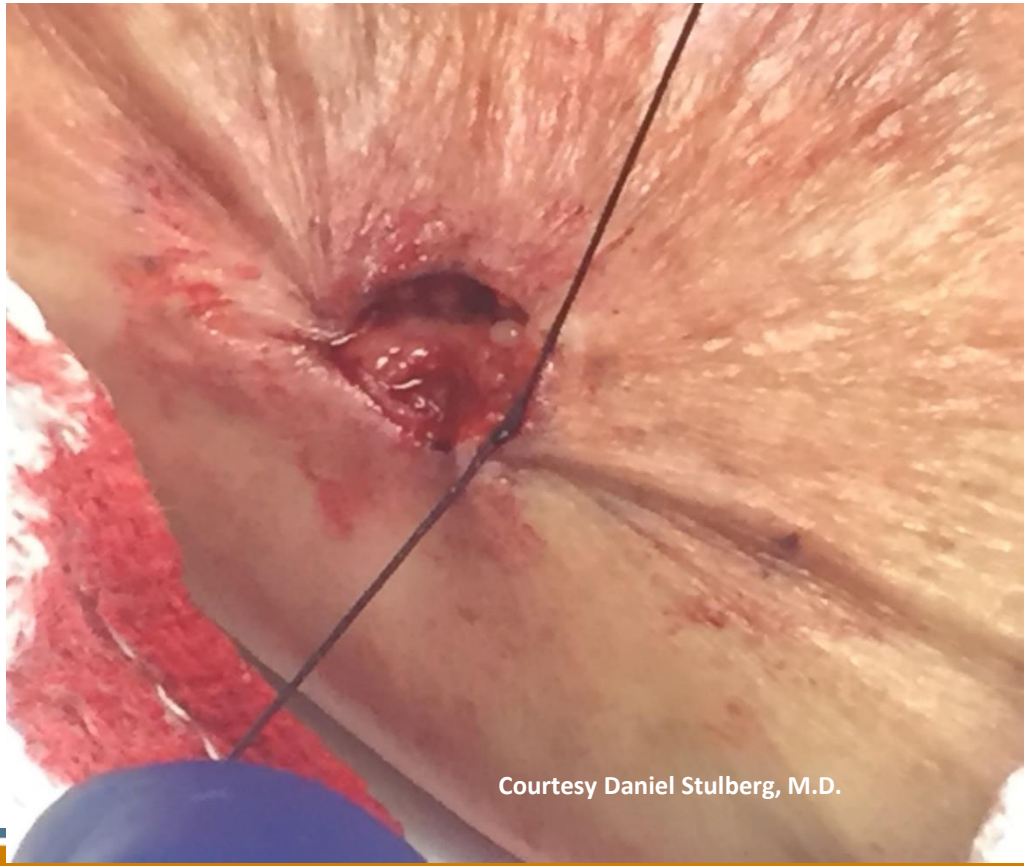
Courtesy Daniel Stulberg, M.D.

Friction knot



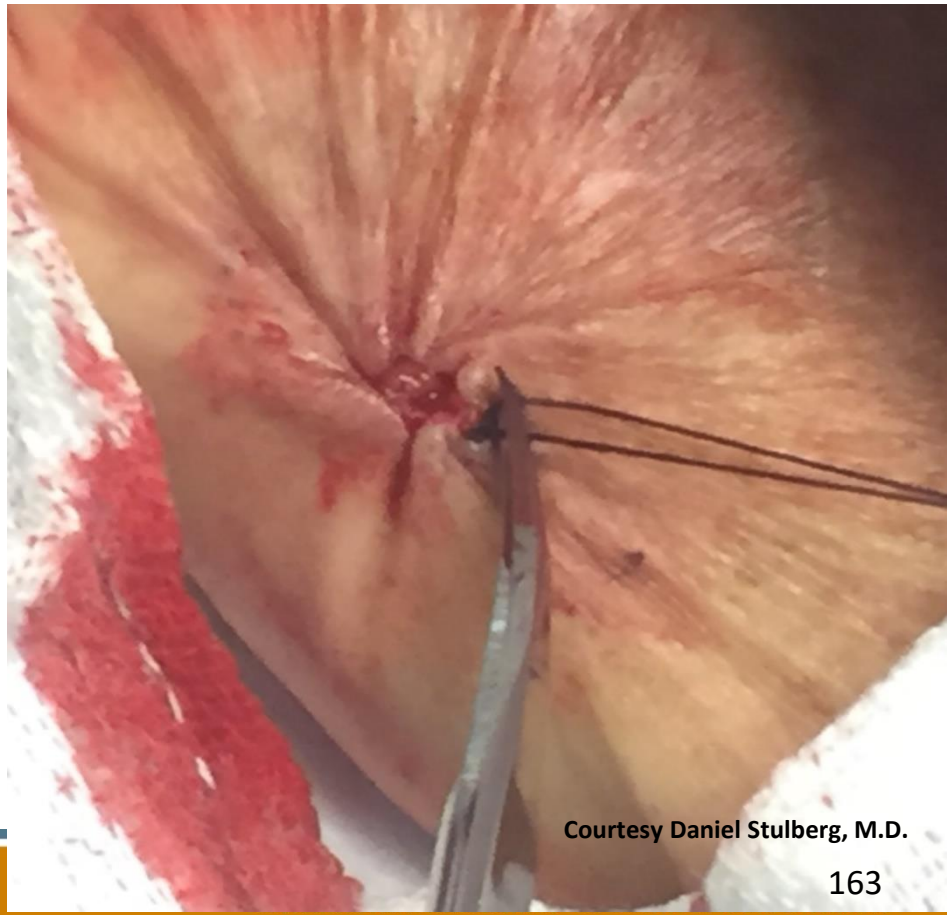
Courtesy Daniel Stulberg, M.D.

Tightening purse string



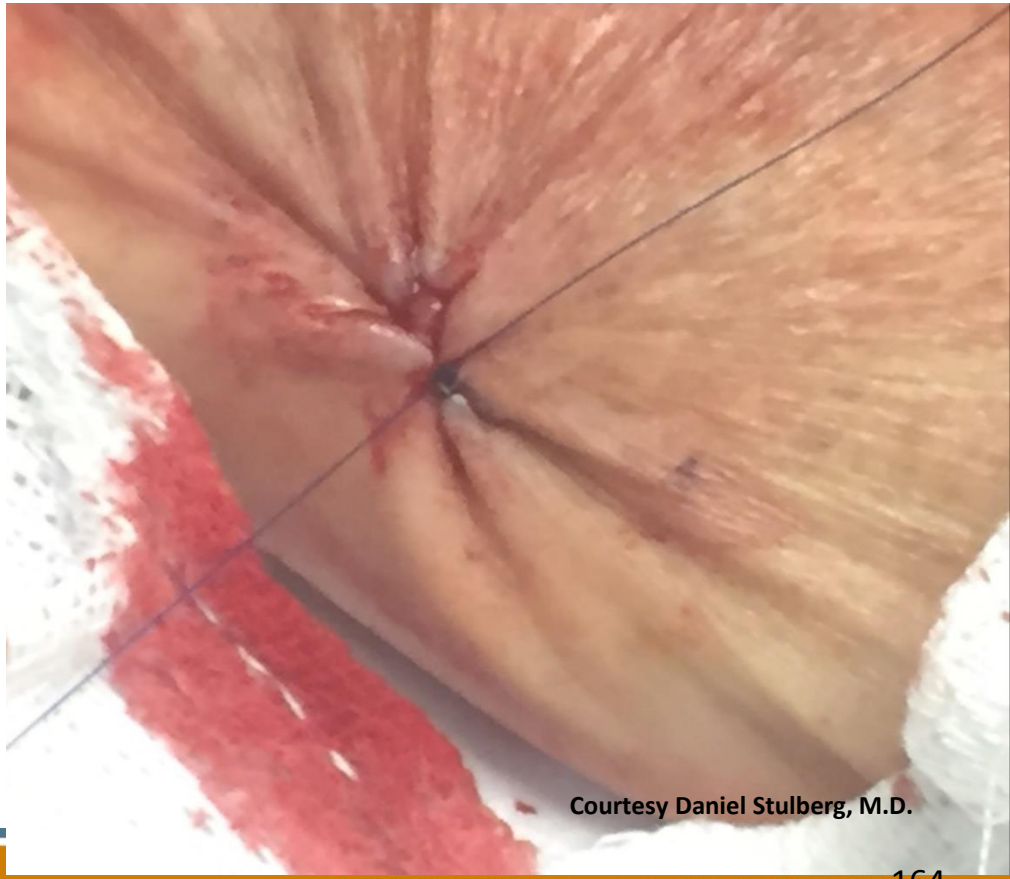
Courtesy Daniel Stulberg, M.D.

Tight enough- Can close as ellipse



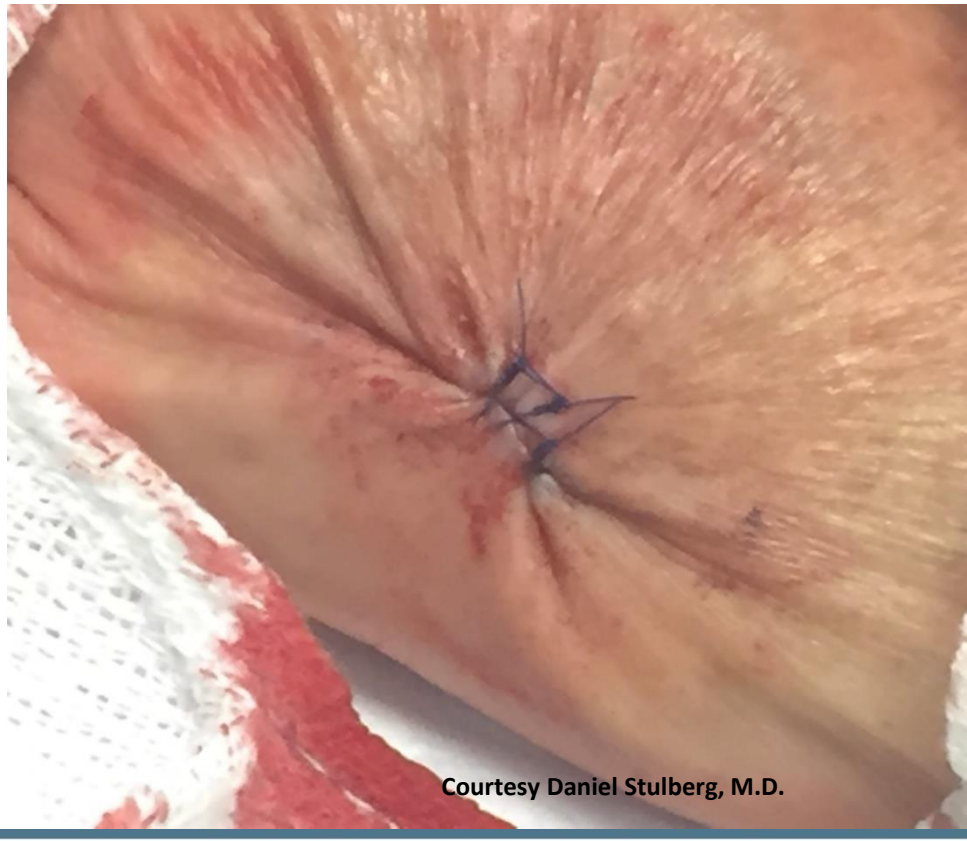
Courtesy Daniel Stulberg, M.D.

Simple suture
4-0 prolene



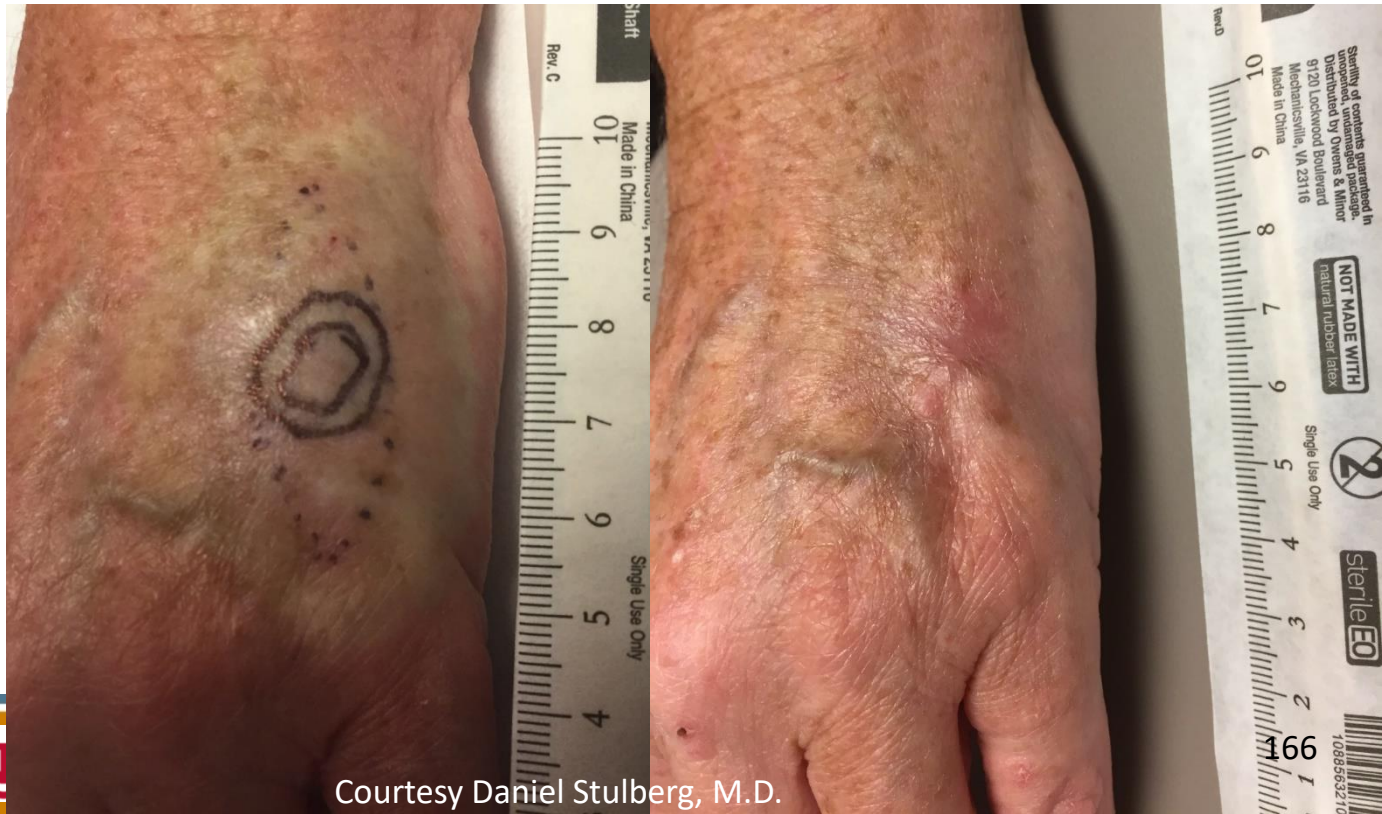
Courtesy Daniel Stulberg, M.D.

3 interrupted sutures
Adhesive strips
if desired



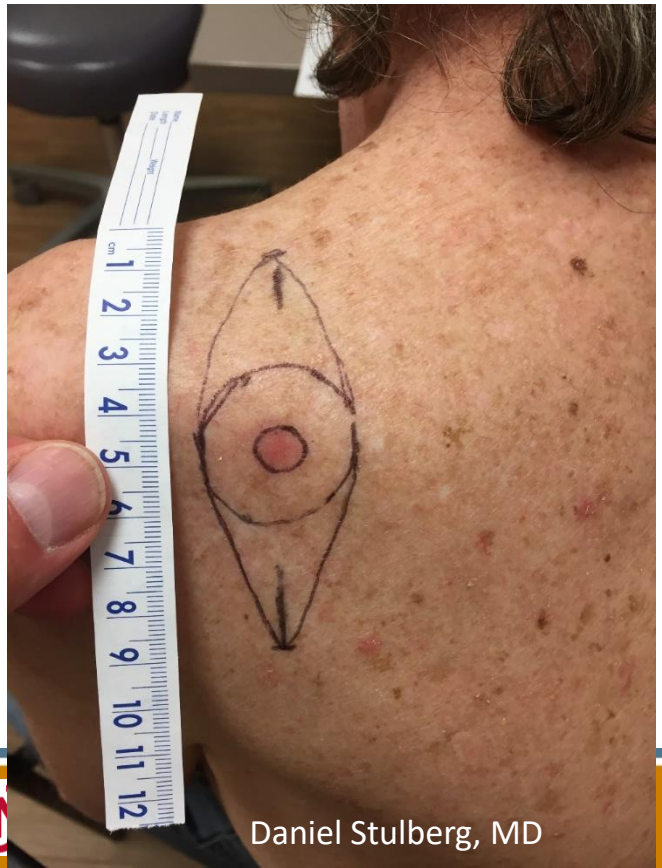
Courtesy Daniel Stulberg, M.D.

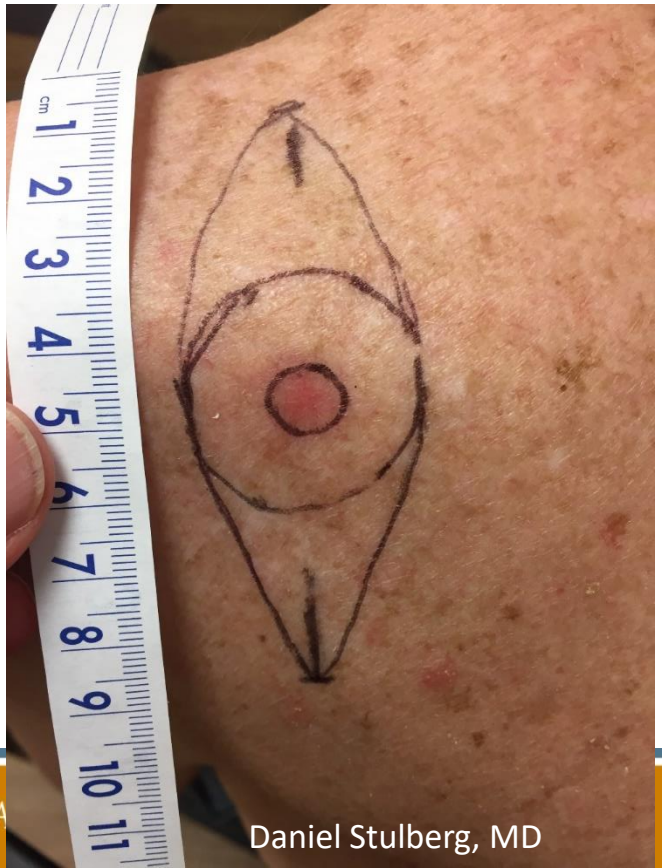
3 months post op



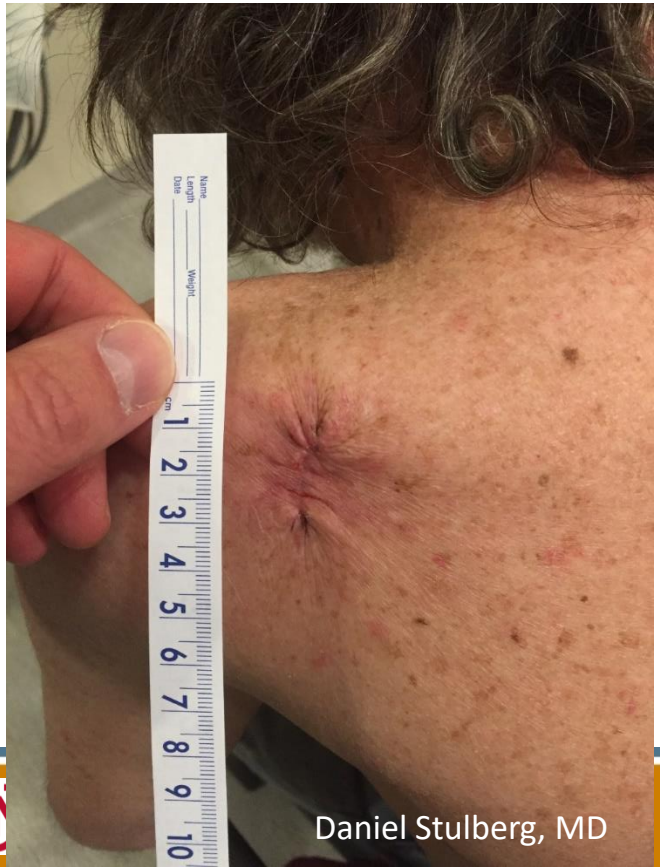
Courtesy Daniel Stulberg, M.D.

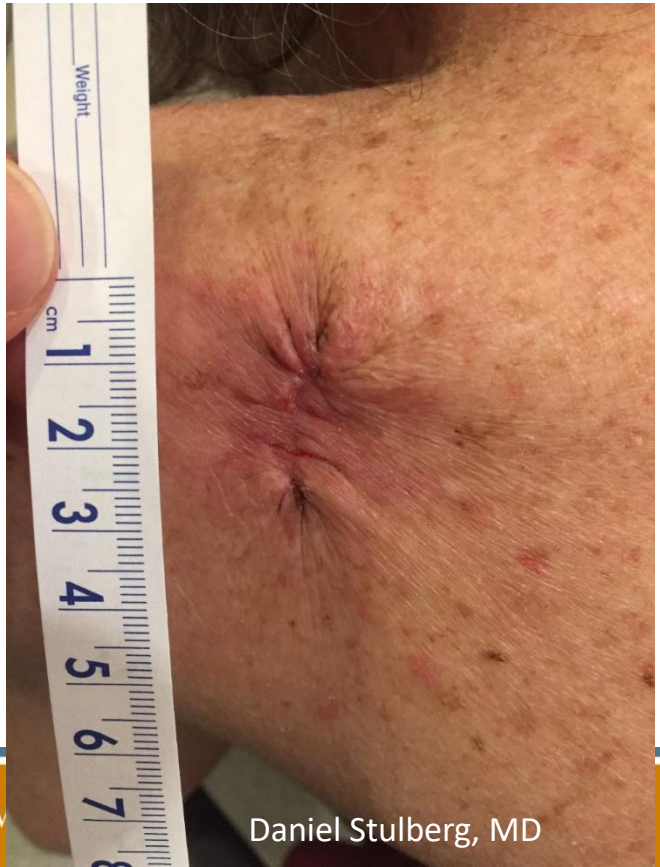
Melanoma – 1 cm margins

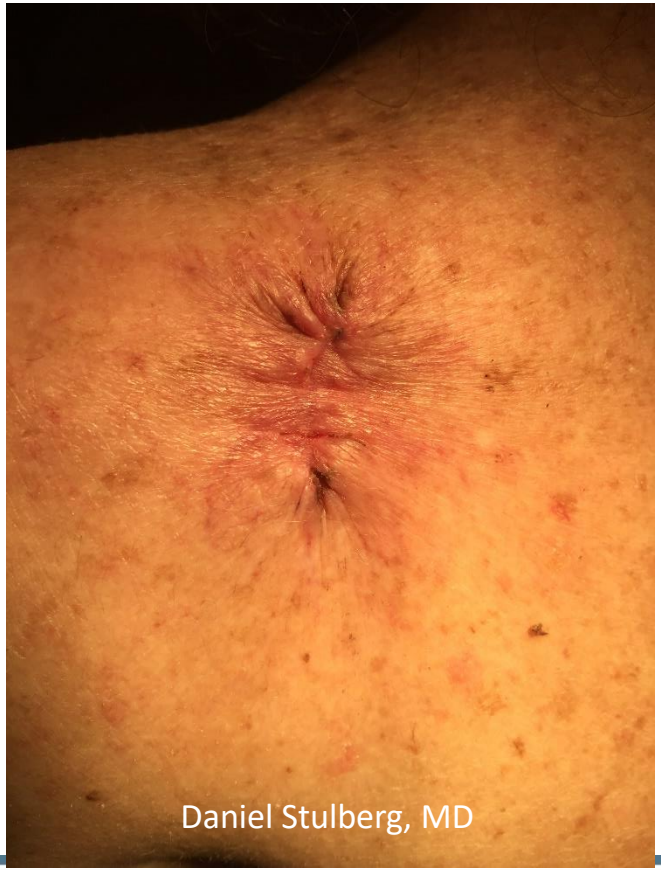




8.5 cm Ellipse ~ 10 cm scar vs 3cm



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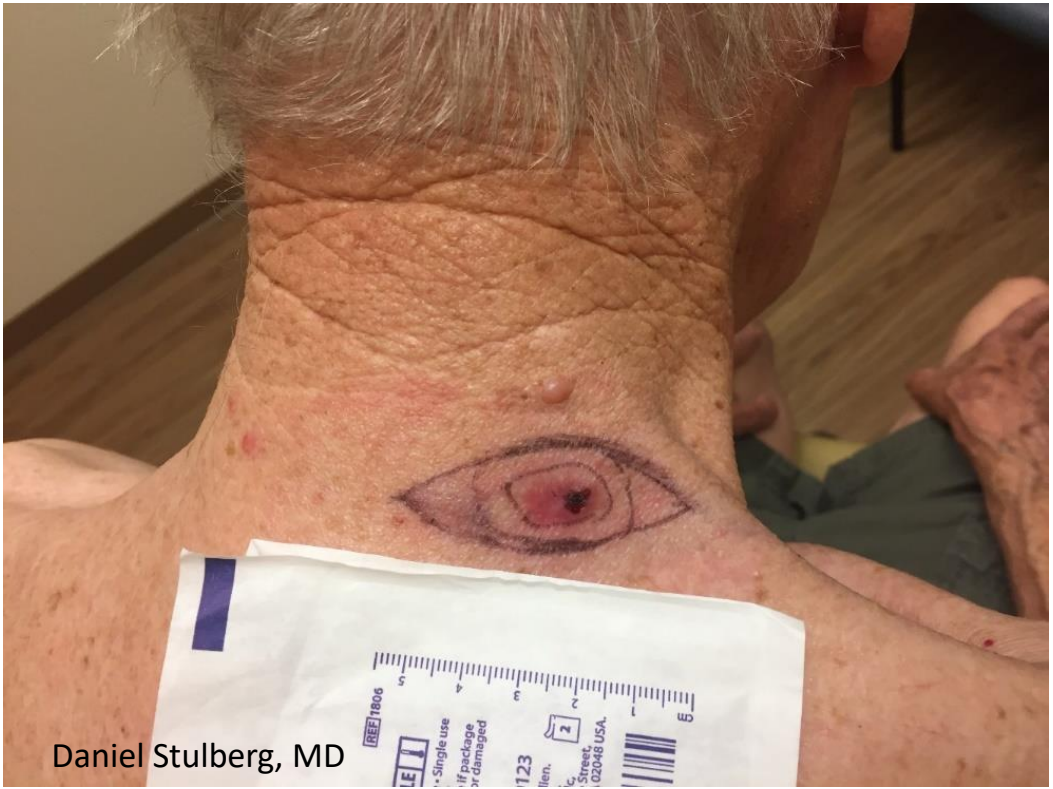
Other options – Cut and see…



Practice

- Cut 2-3 circle
- Practice purse string with 2-0 vicryl
- Final closure with prolene if time

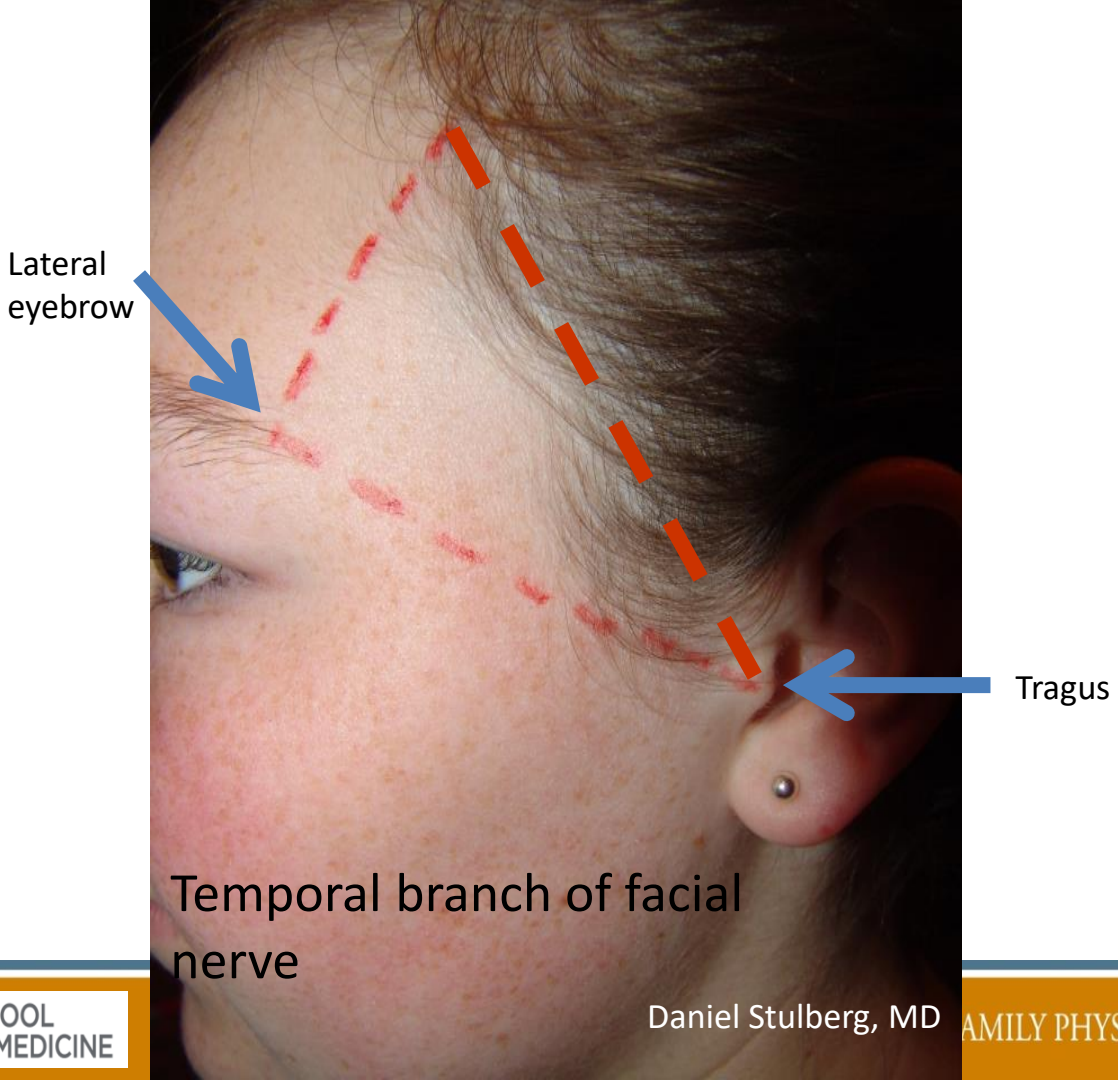
Billing pearls

- Don’t forget intermediately complex closure charge $$
- Excision pays better than biopsy
- January 2019 updates on biopsies
  - Tangential (sup. shave) 11102
  - Punch 11104
  - Incisional 11106

Bonus material time allowing

Avoiding trouble

- Temporal branch of the facial nerve
- Middle branch of the facial nerve
- Spinal accessory nerve


Lateral eyebrow
Tragus
Temporal branch of facial nerve

Posterior to lateral canthus line

Facial nerve – Temporal, zygomatic, buccal, mandibular, cervical

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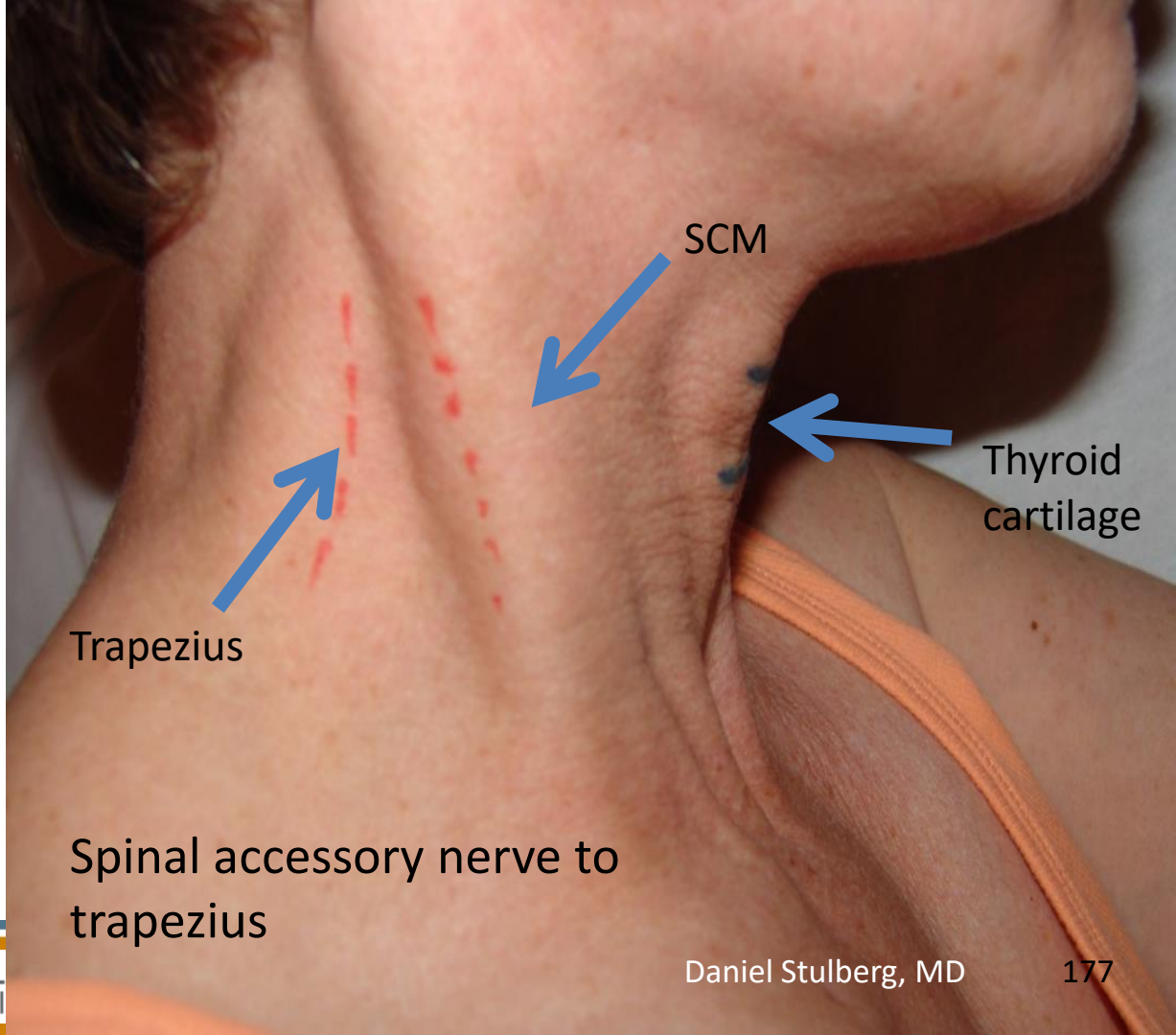
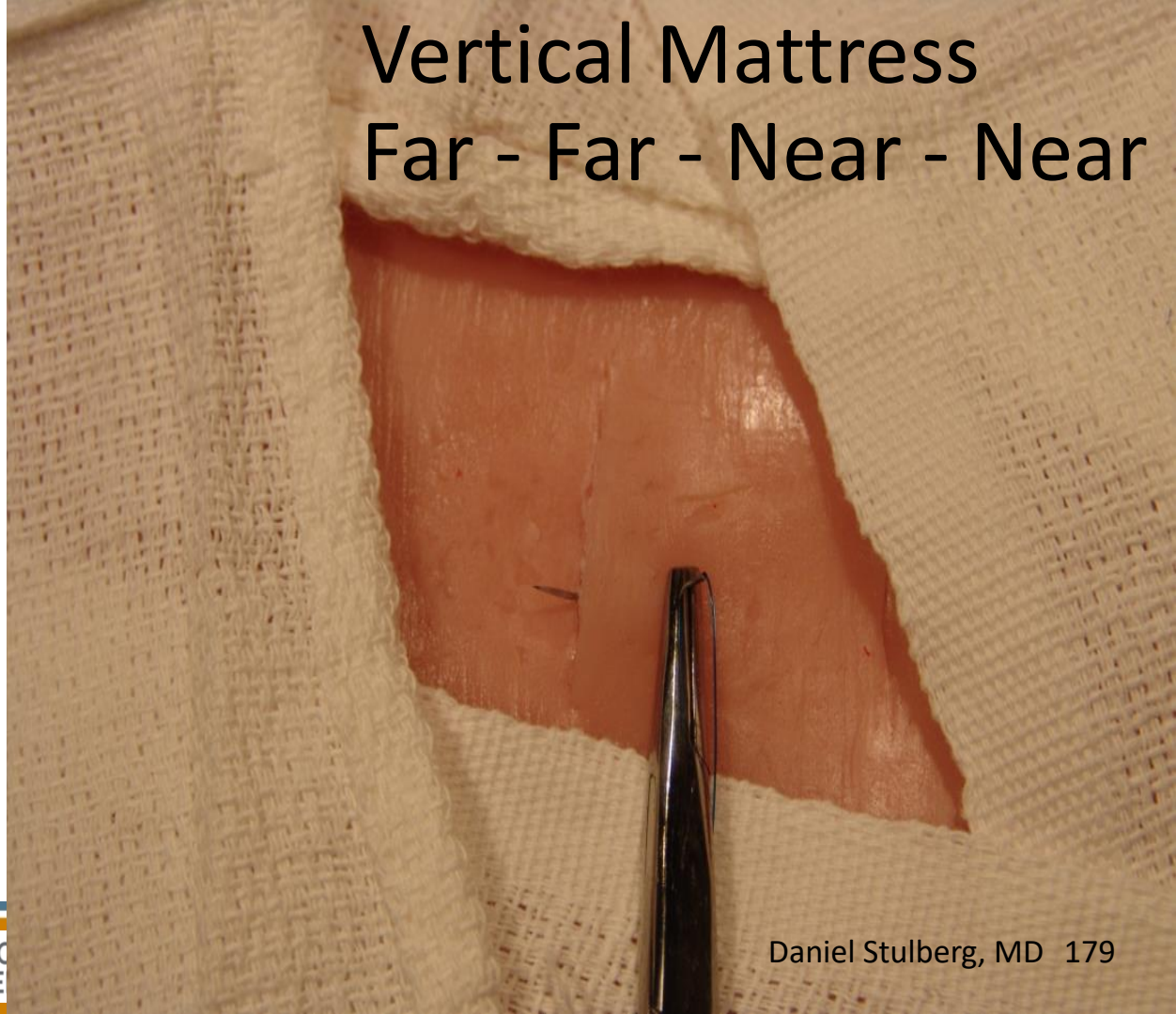


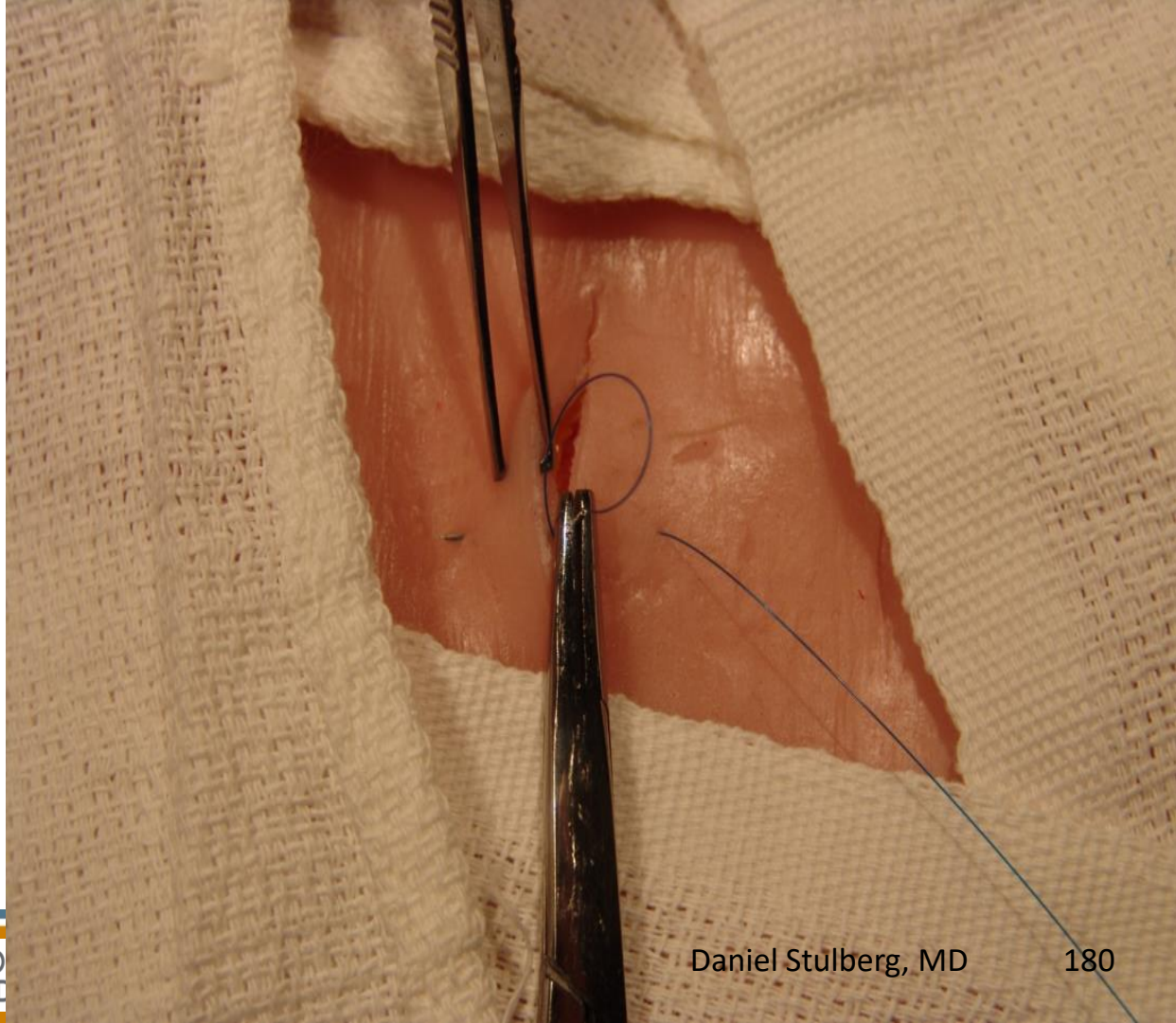
Spinal accessory nerve to trapezius

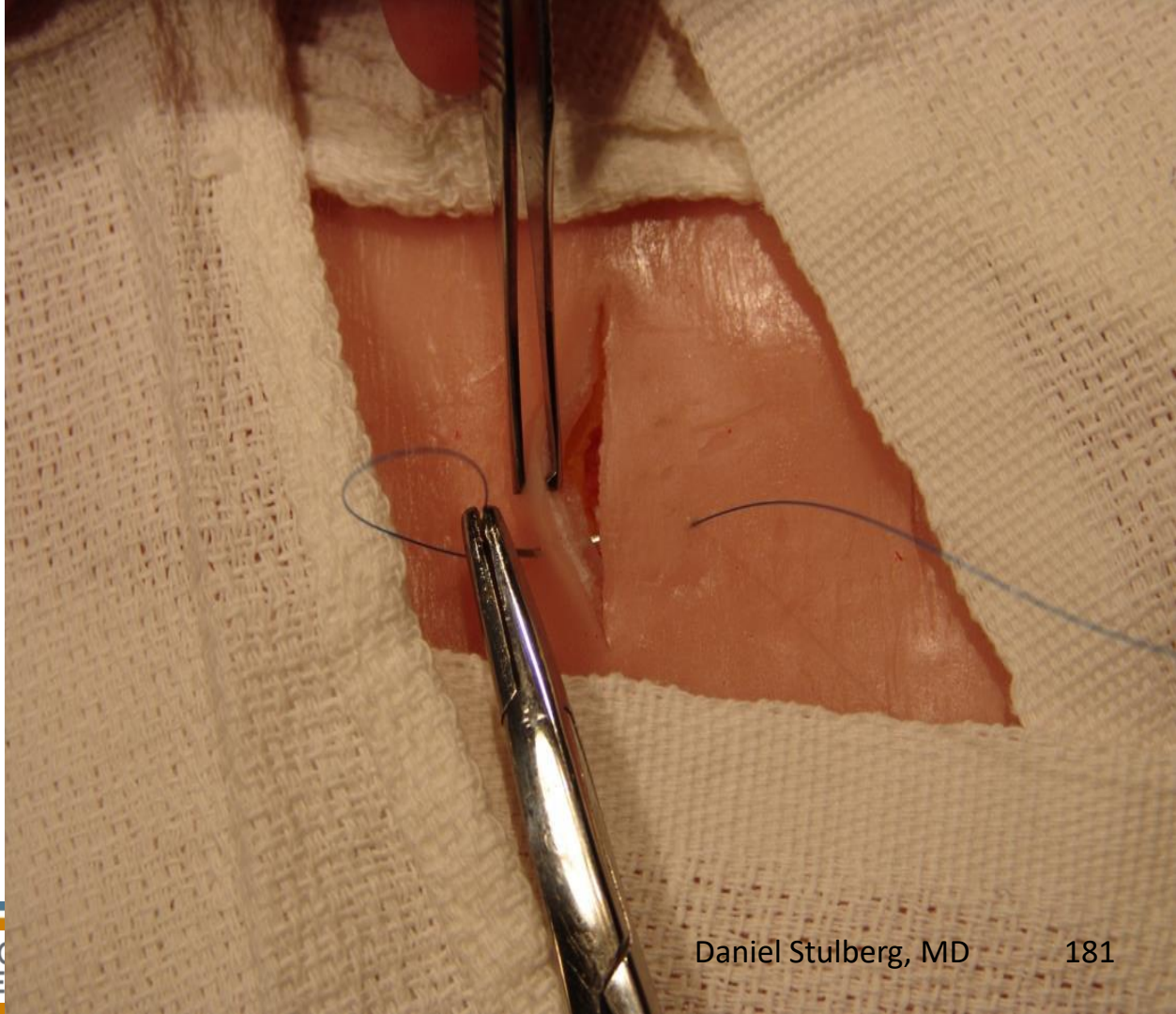
Skin tension and fragile skin

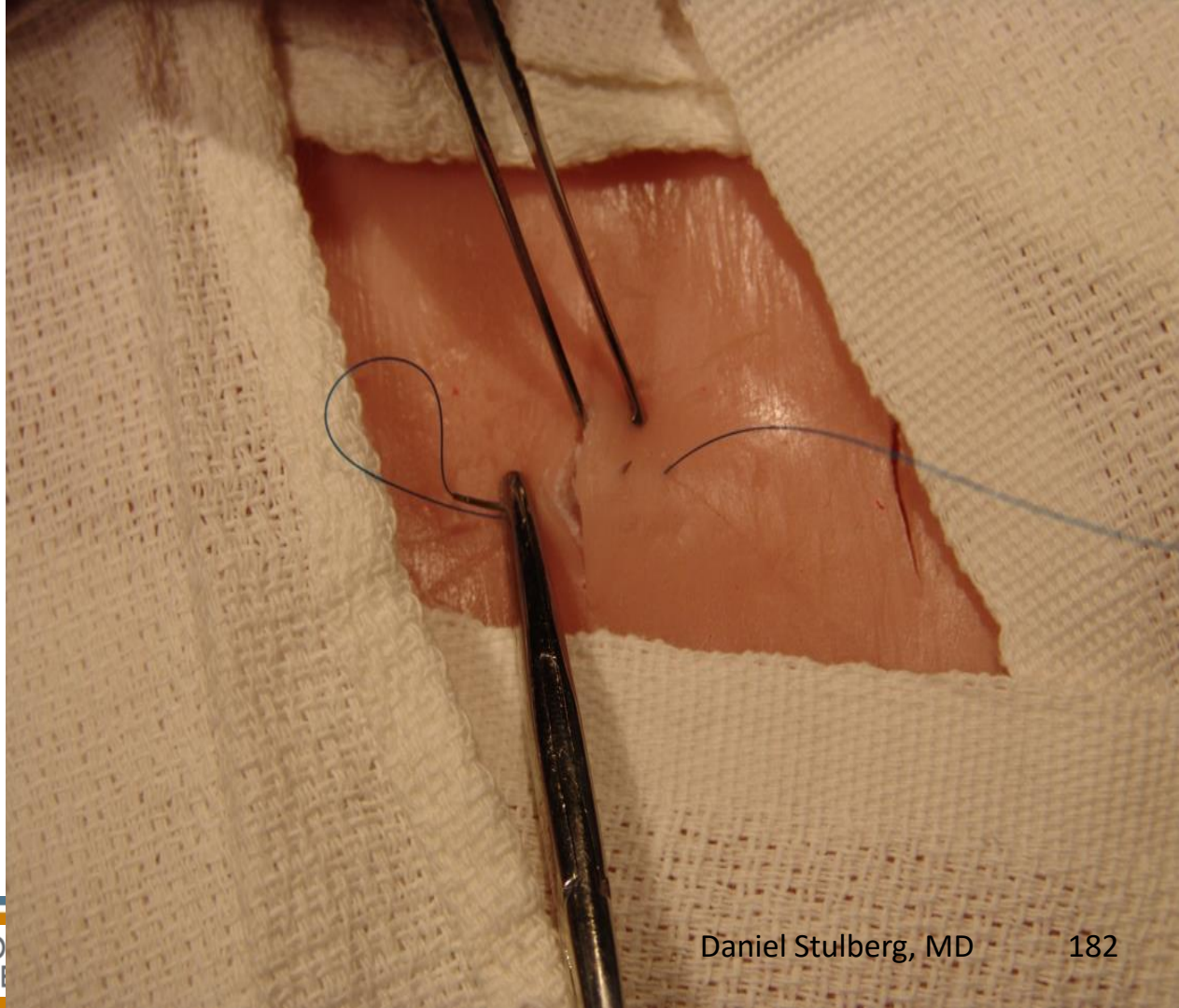
- Vertical mattress
- Horizontal mattress
- Adhesive tapes

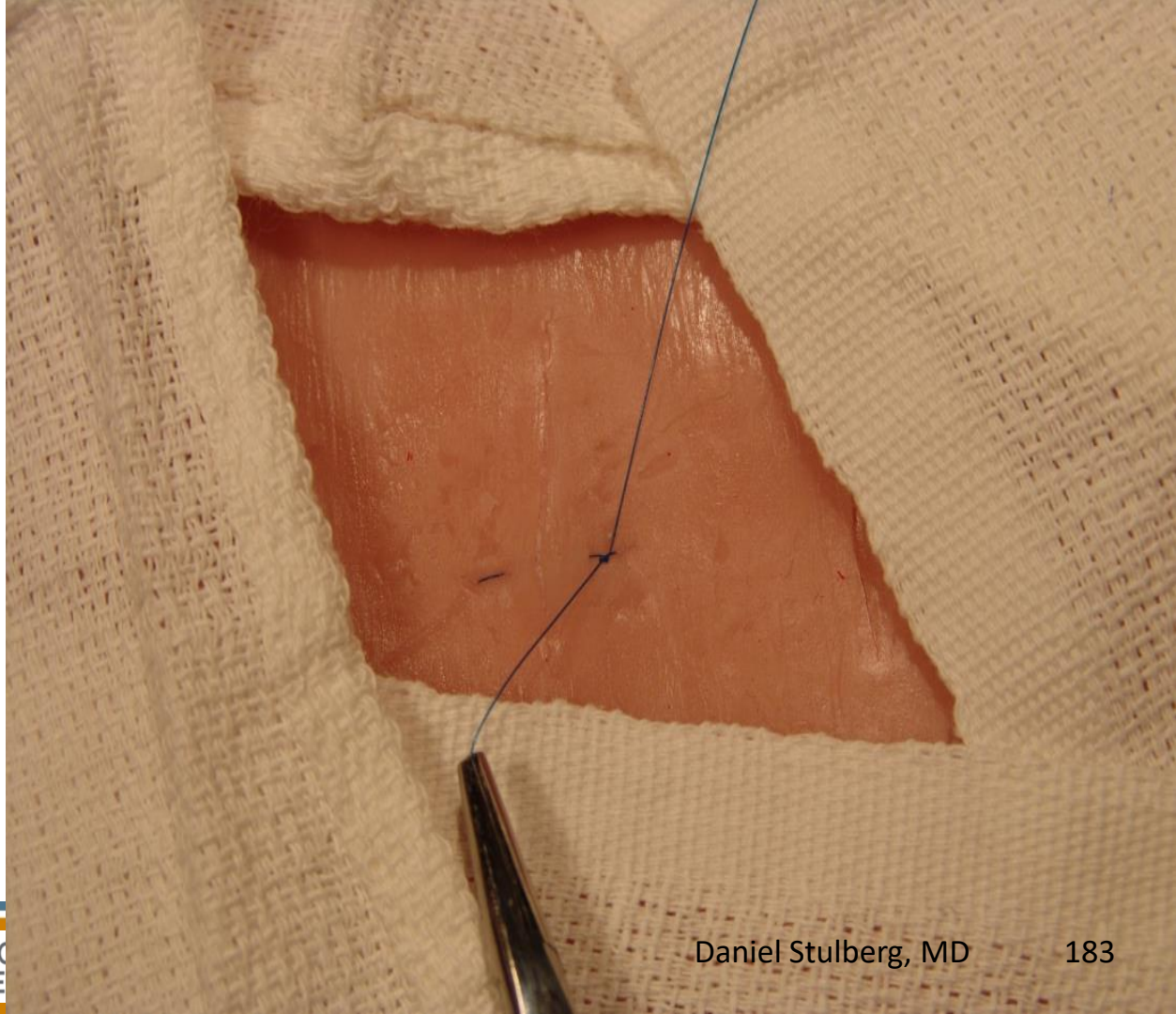
Vertical Mattress
Far - Far - Near - Near



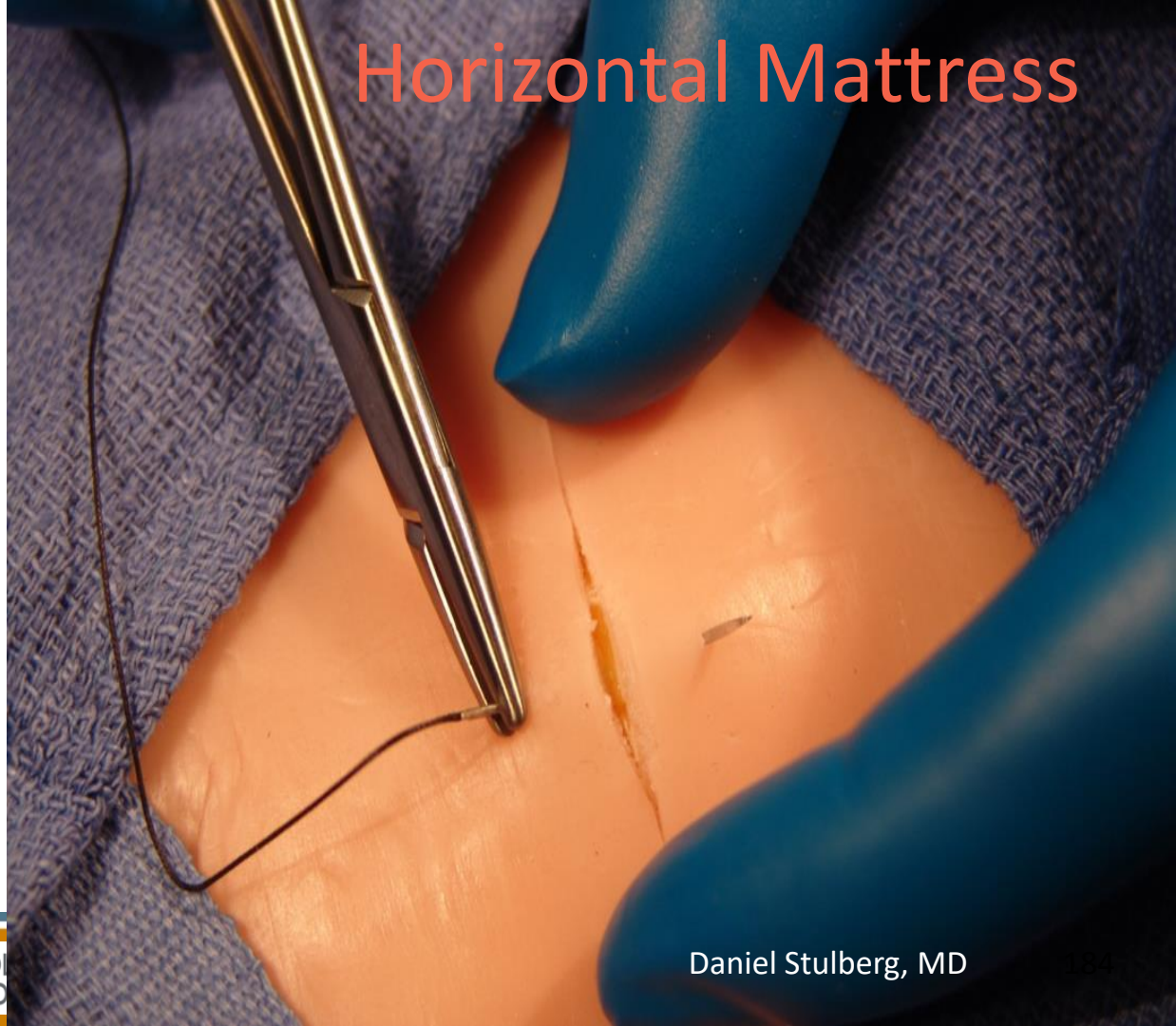








Horizontal Mattress



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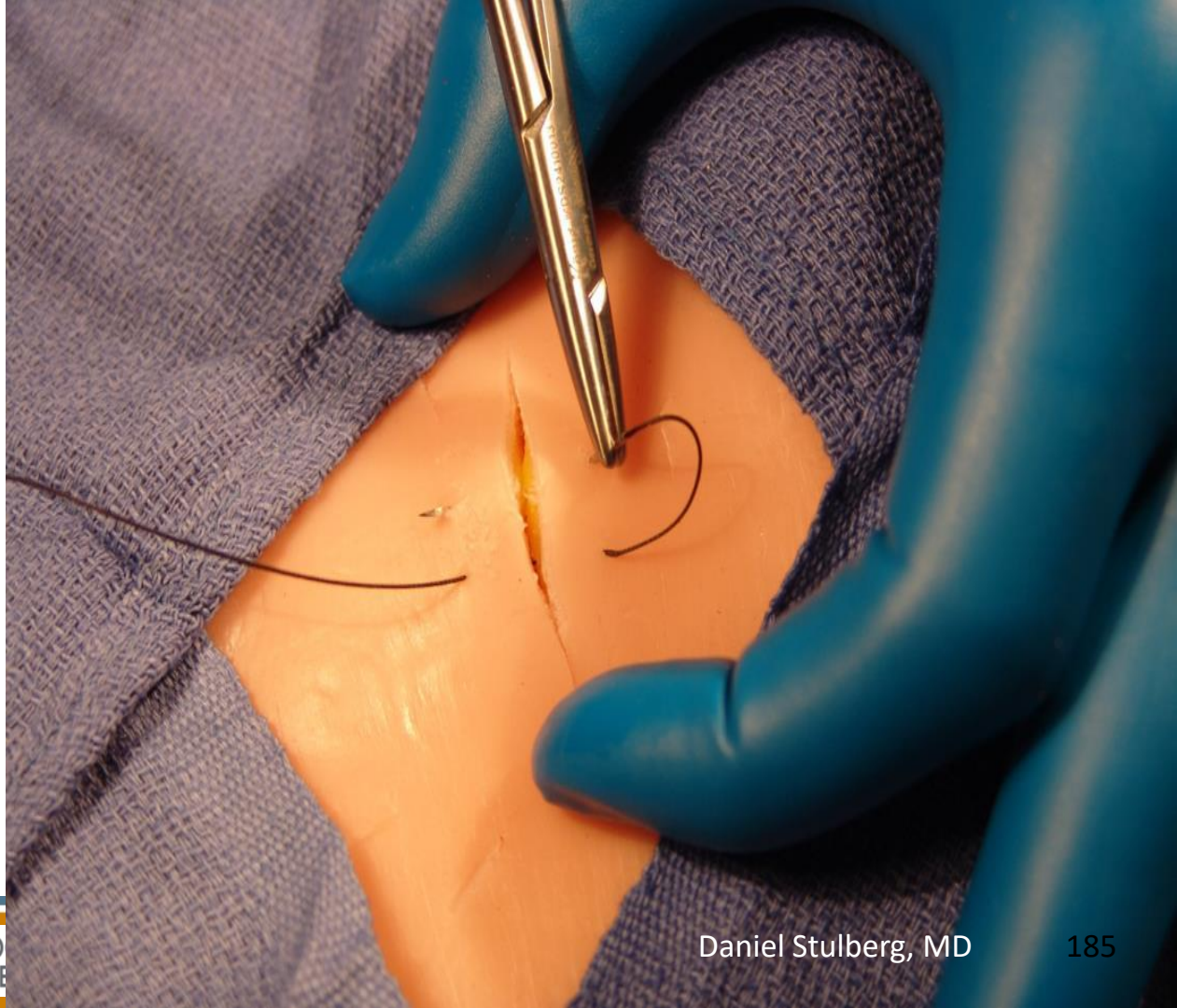
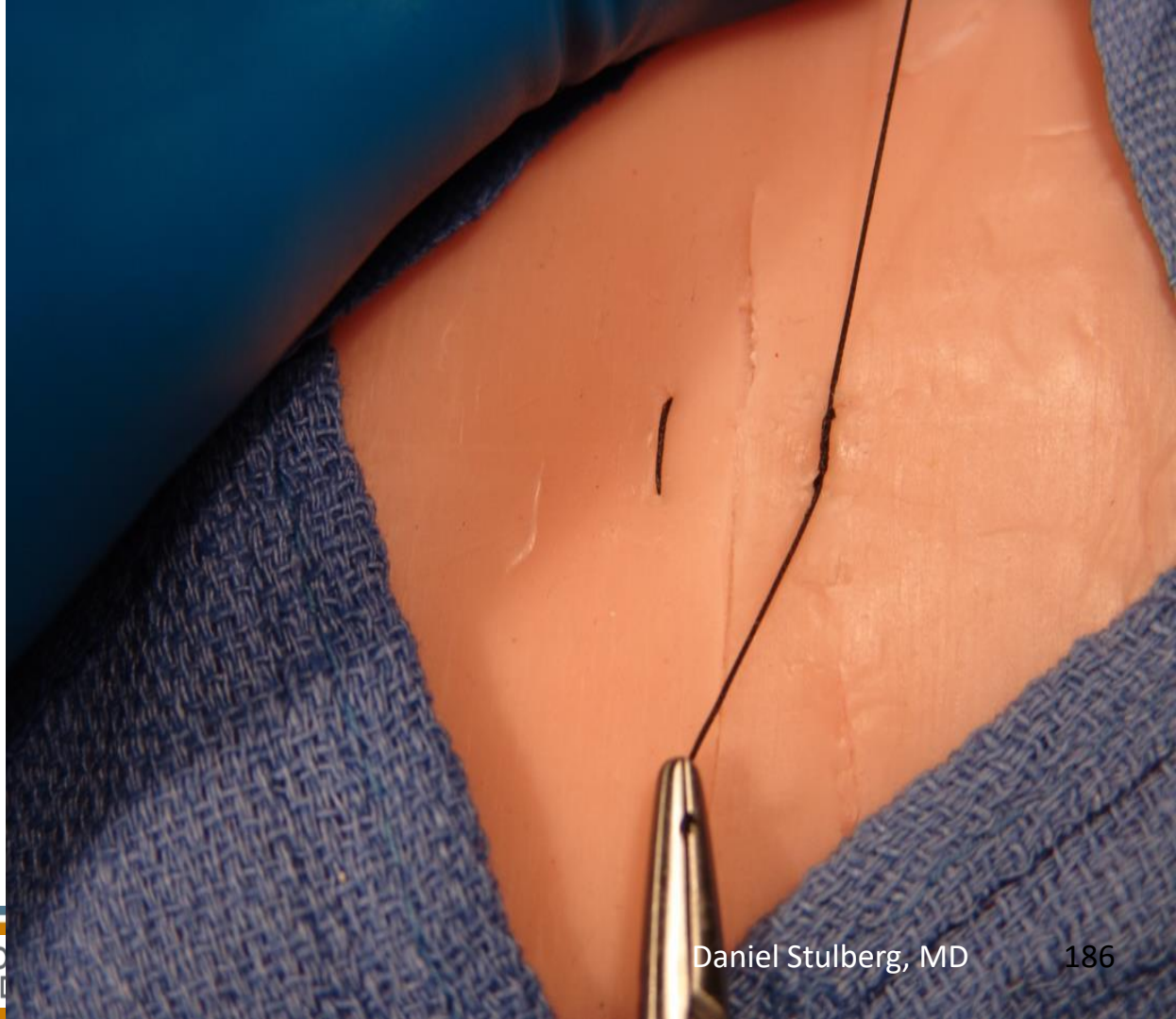
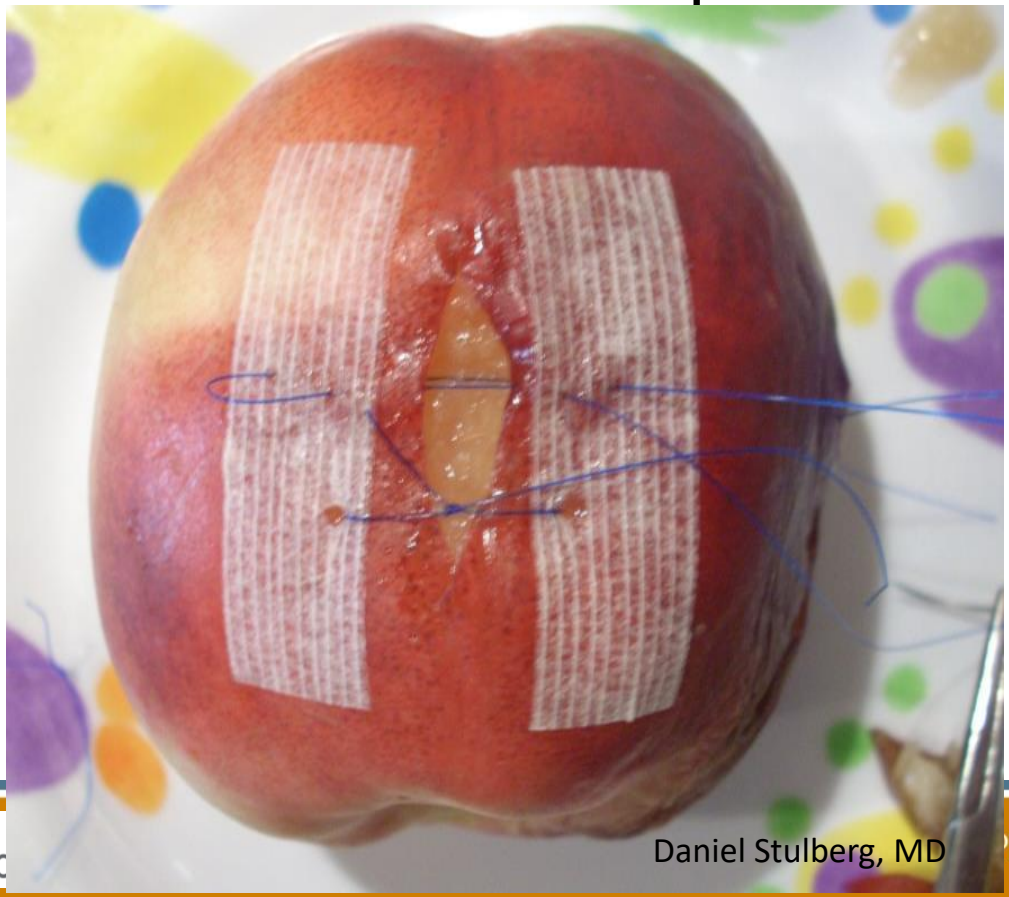




Vertical Mattress + Adhesive Strips



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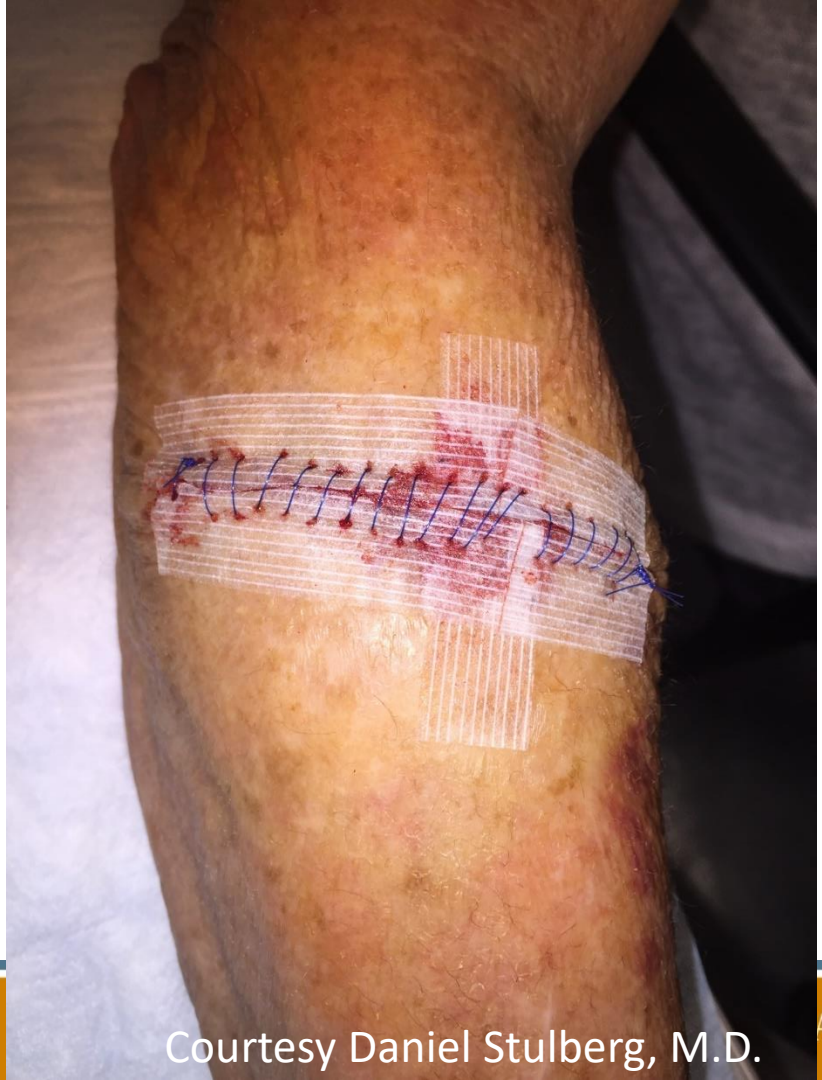
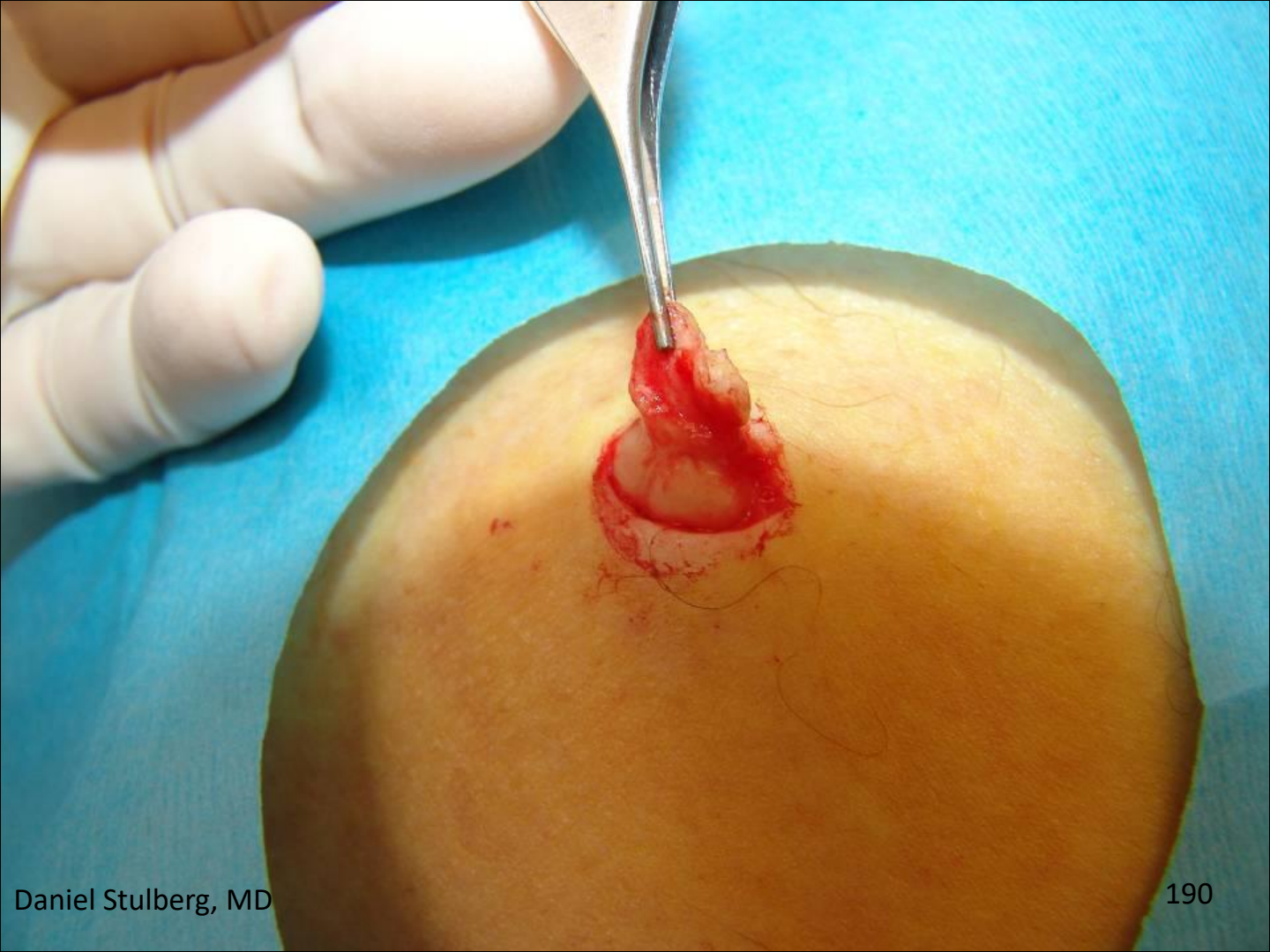
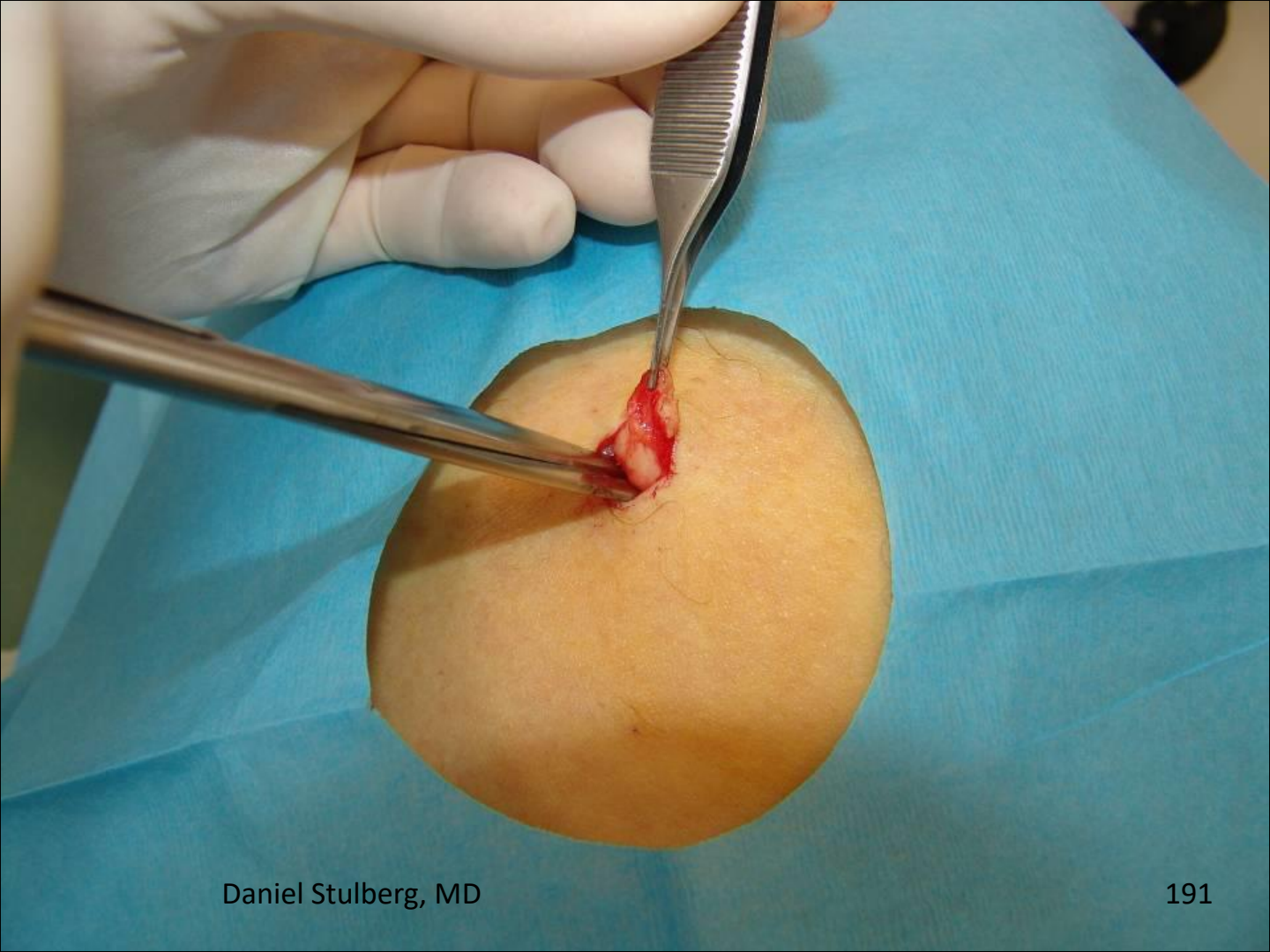


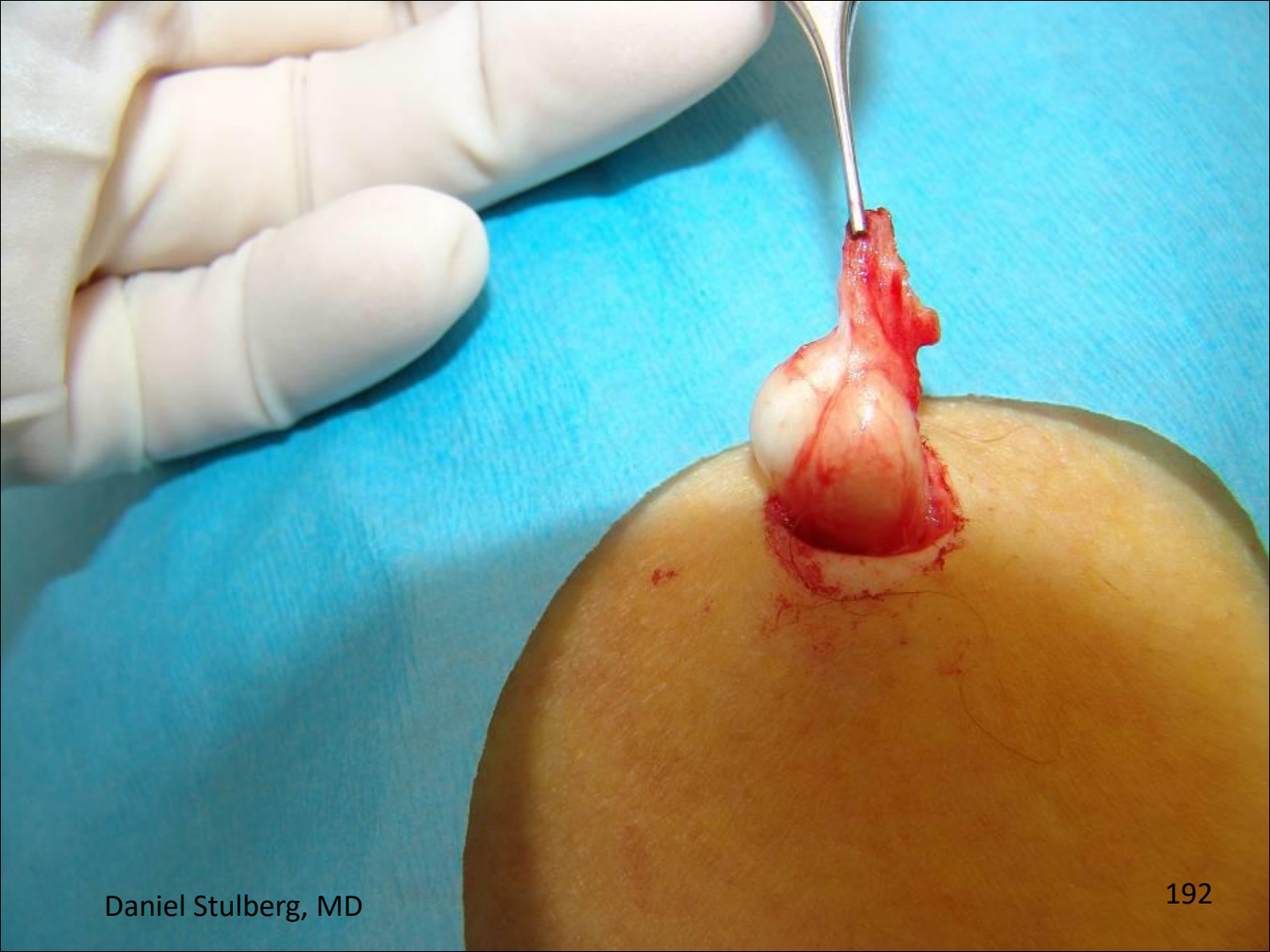
Courtesy Daniel Stulberg, M.D.

Subcutaneous Massess

- Epidermoid cysts
- Lipomas







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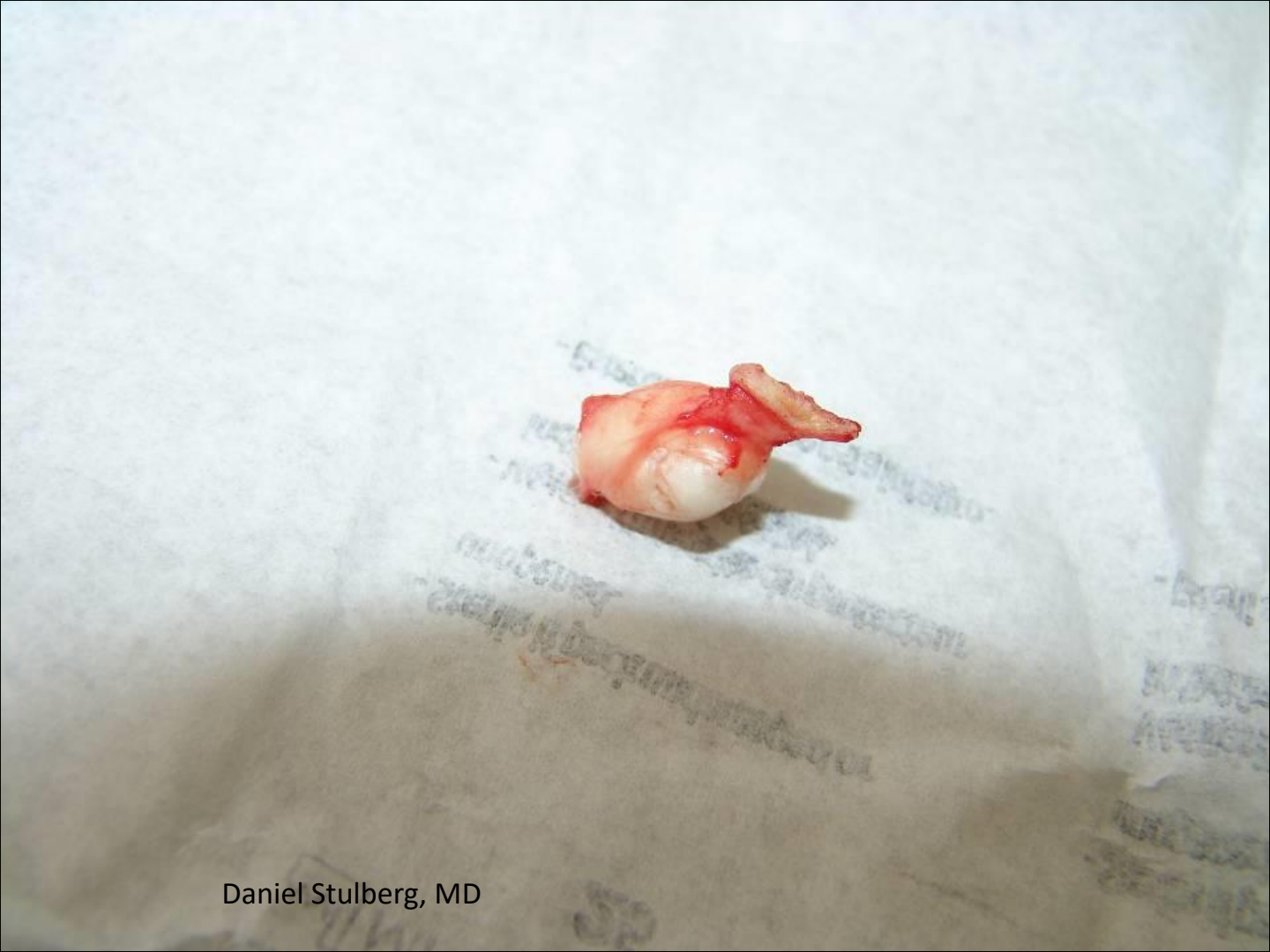

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Other cyst options

- Punch excision
- Minimal cyst excision technique

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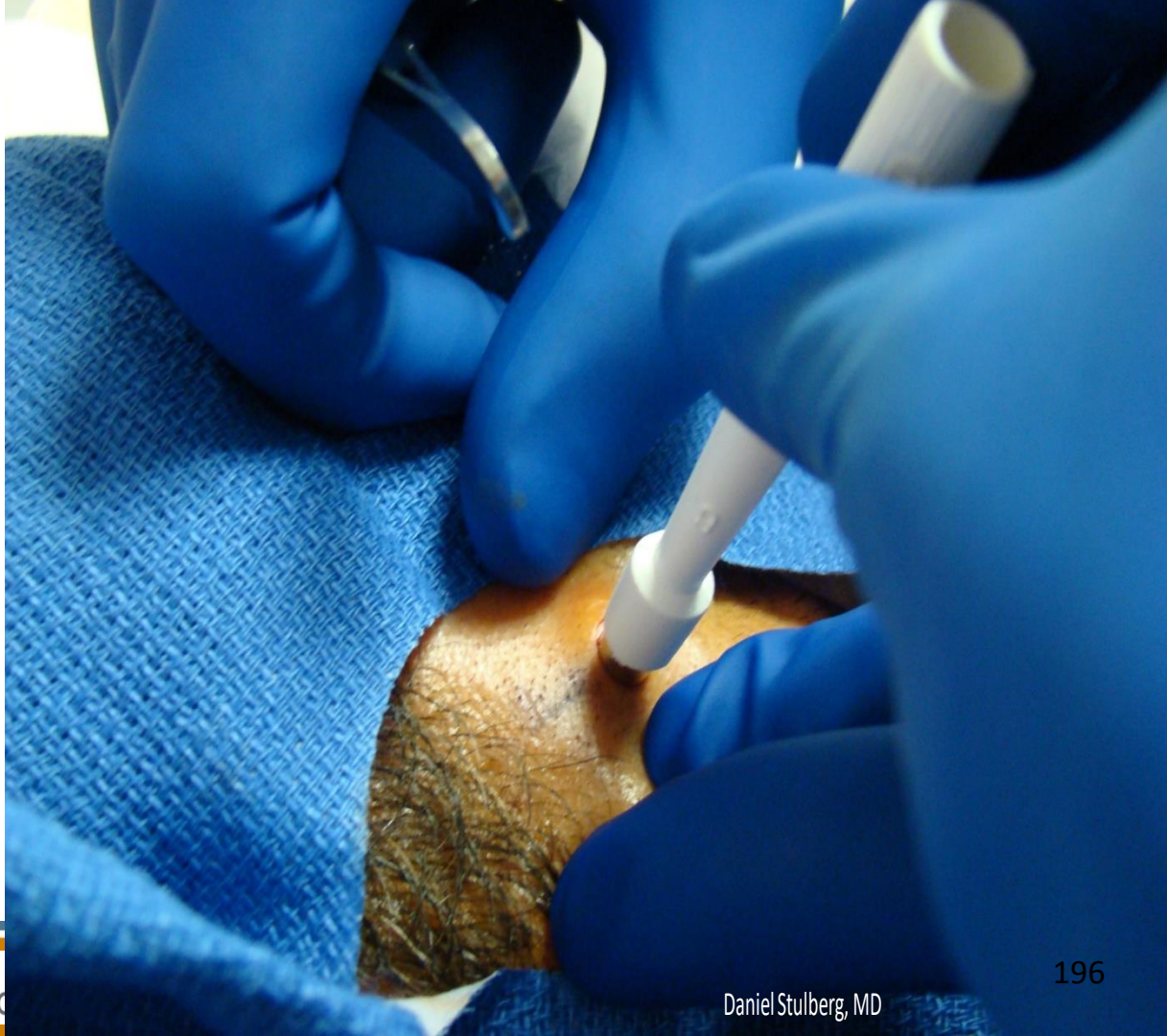

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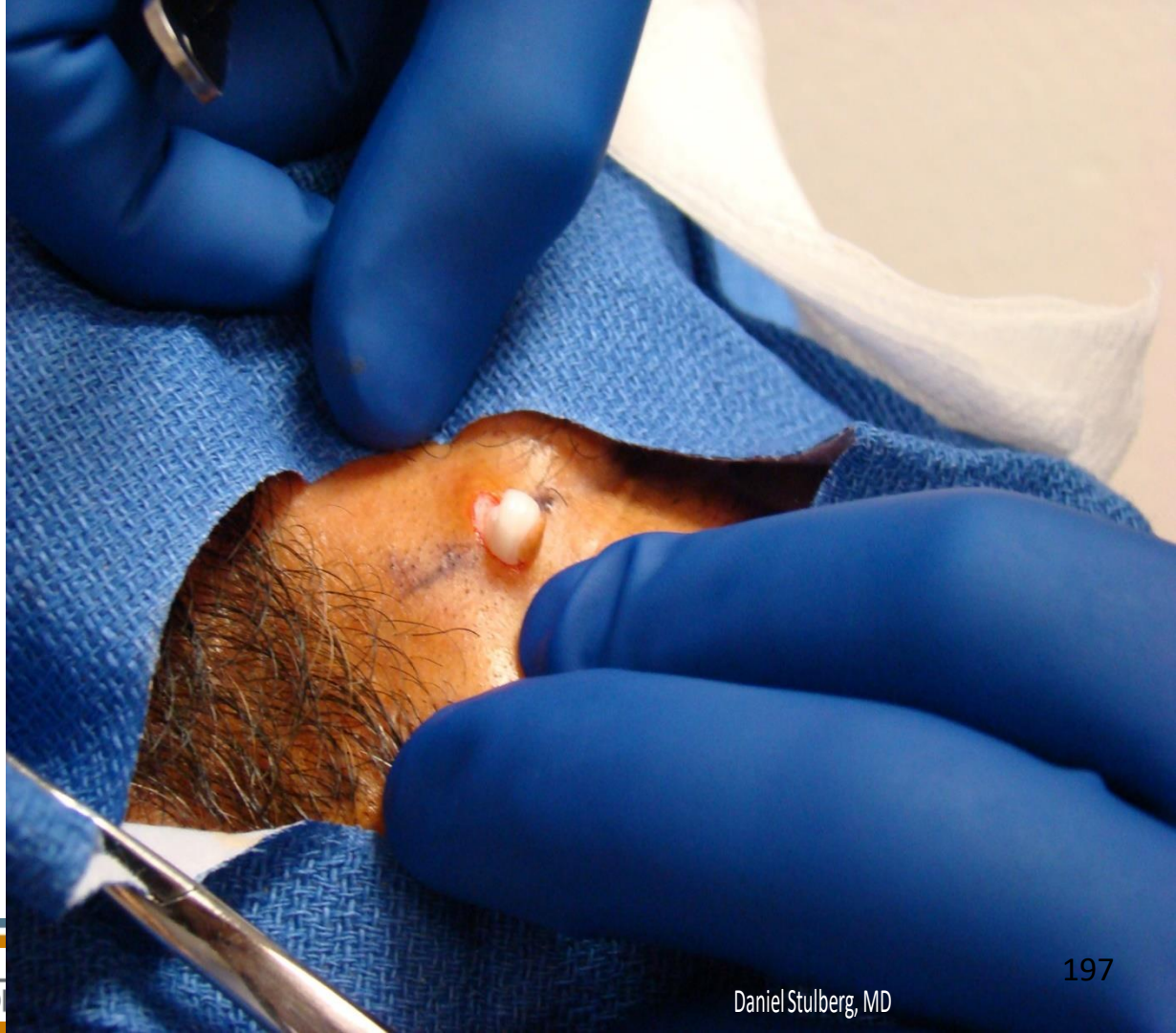

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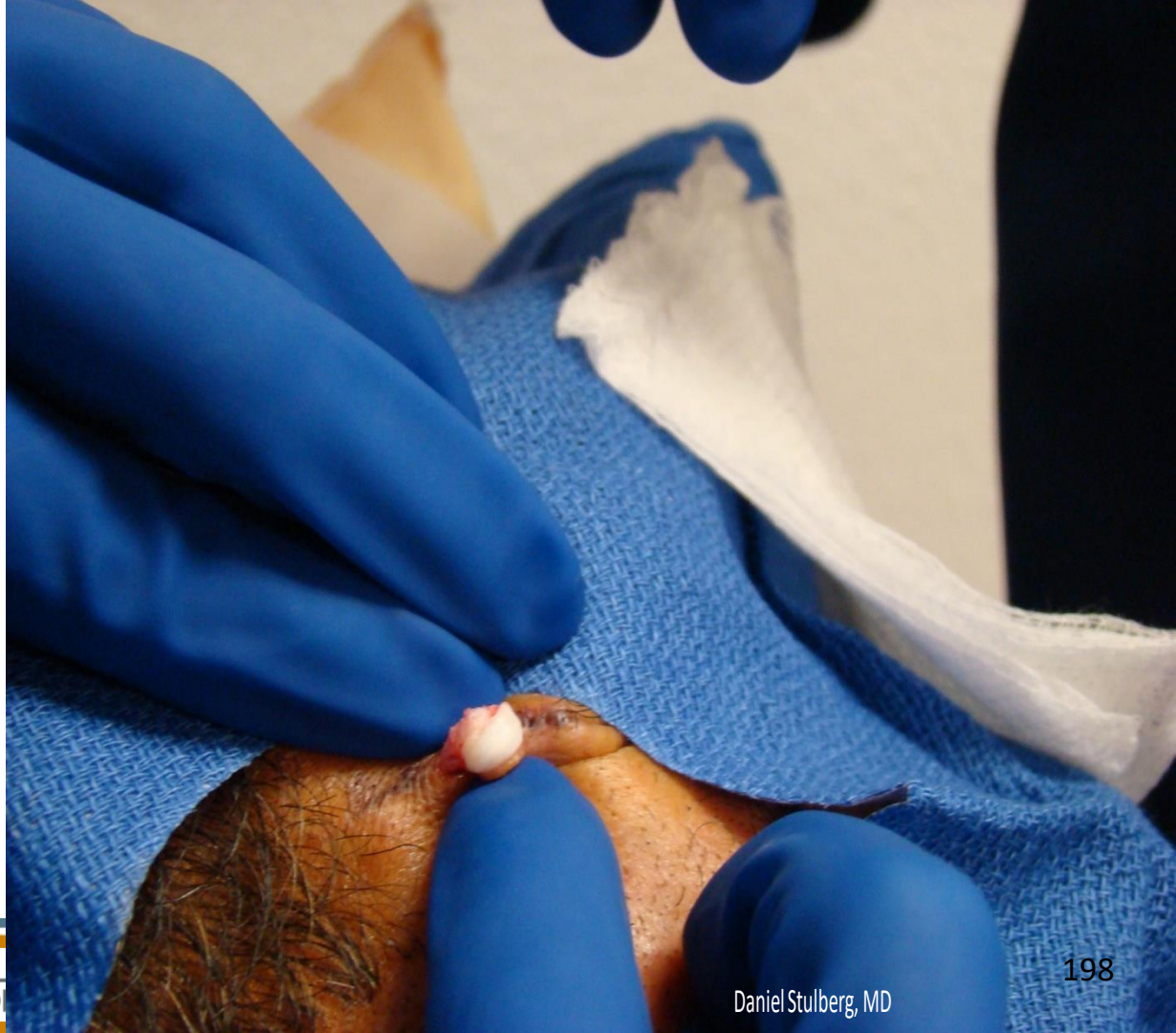

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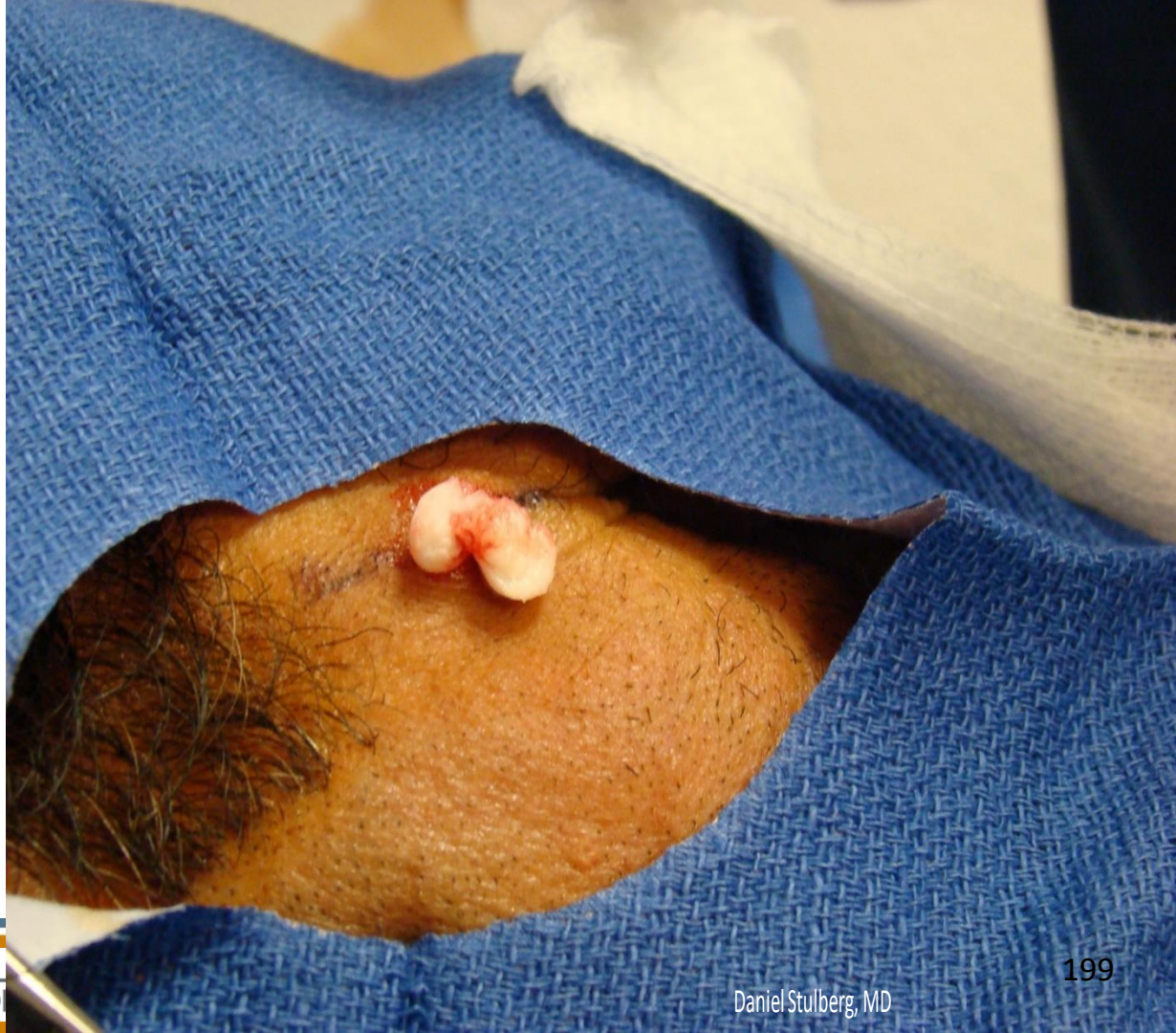

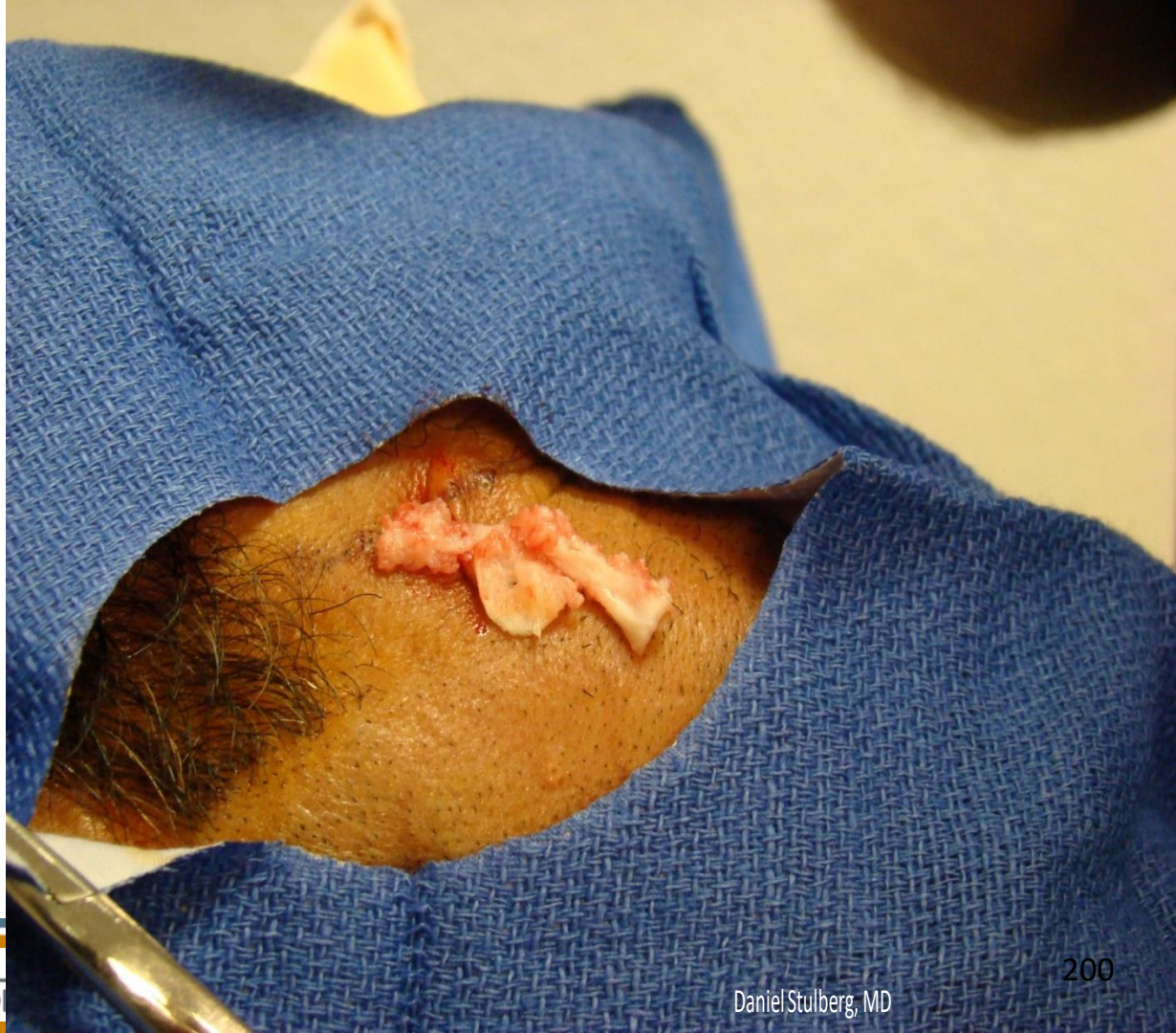

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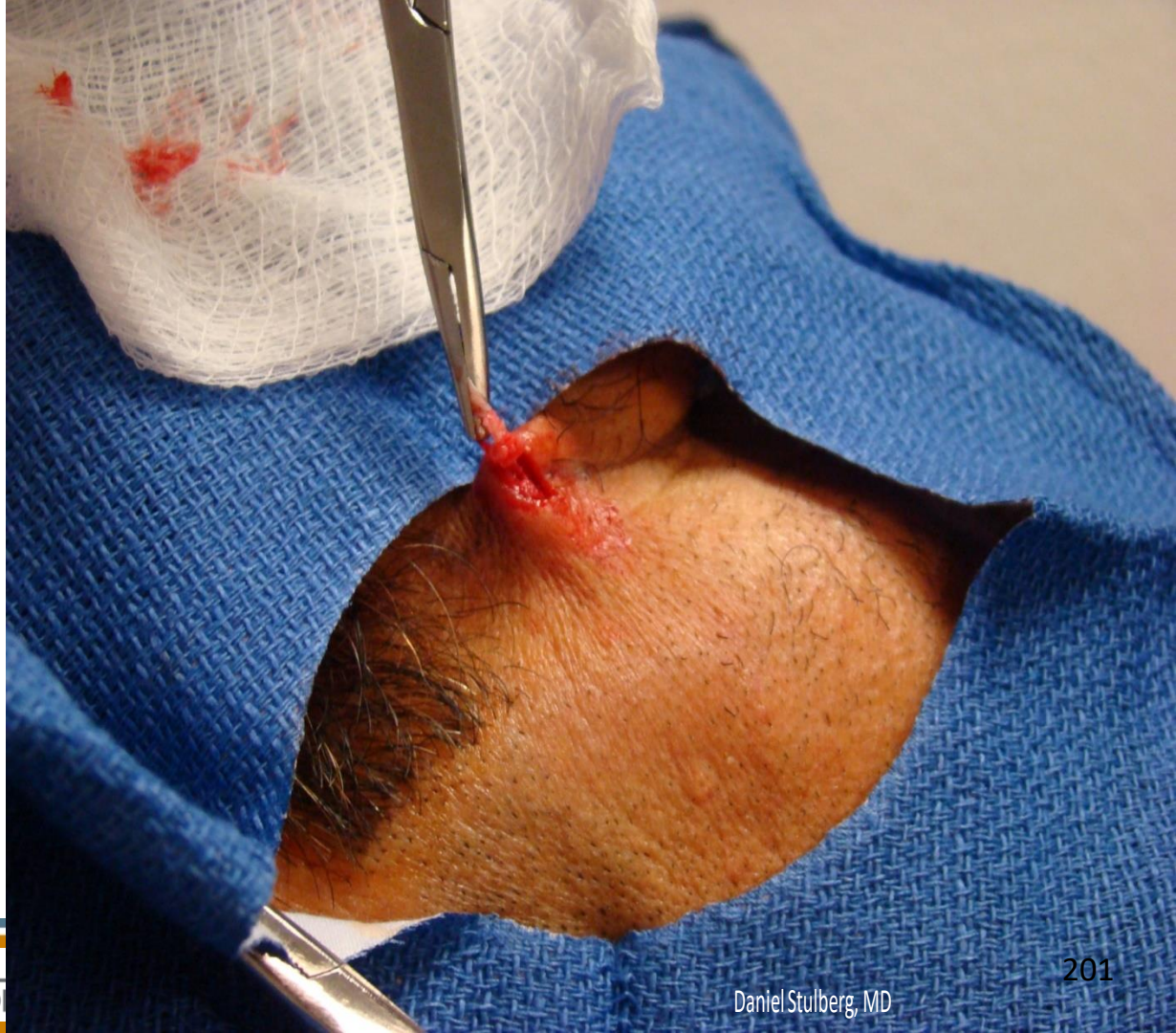

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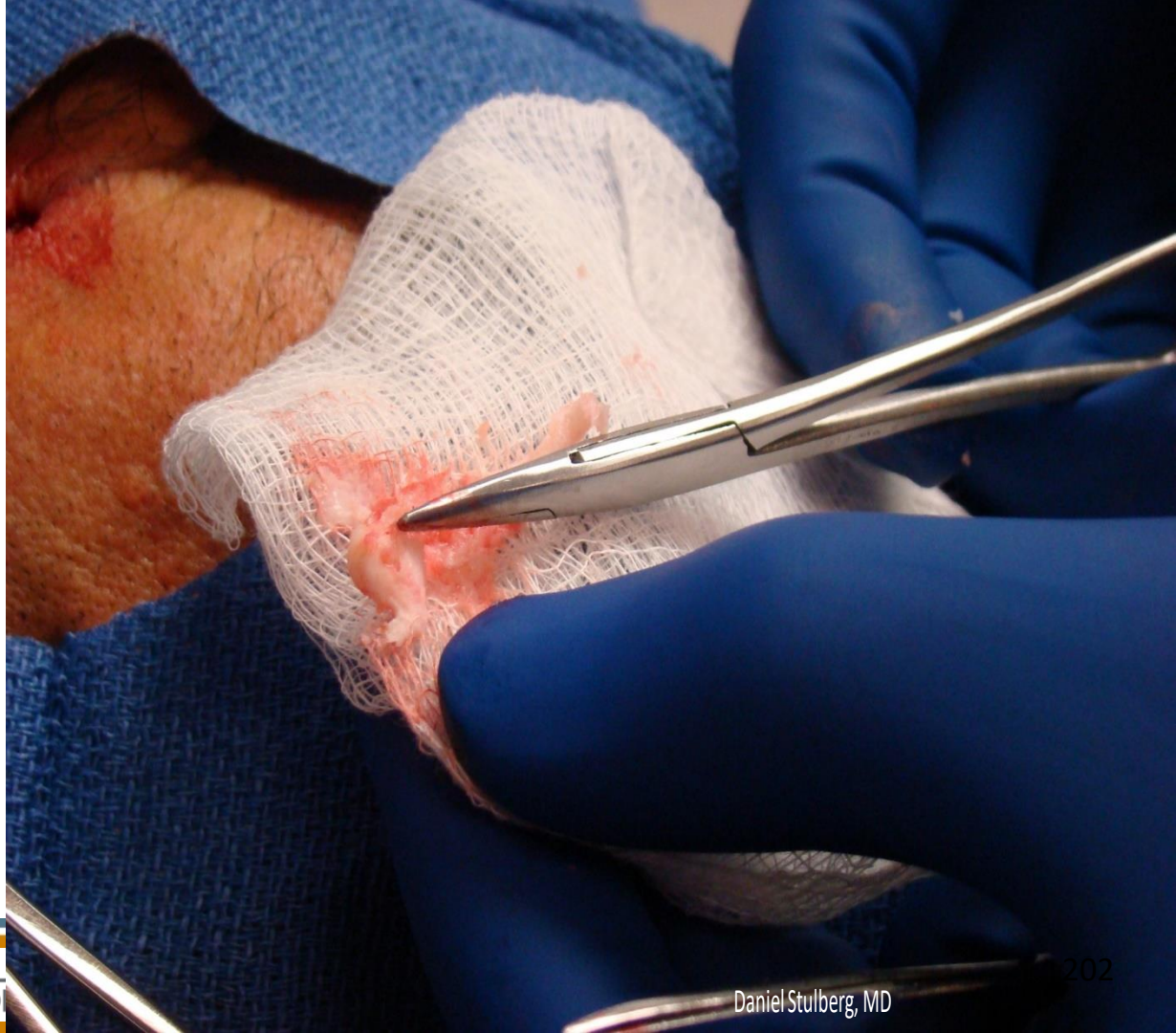

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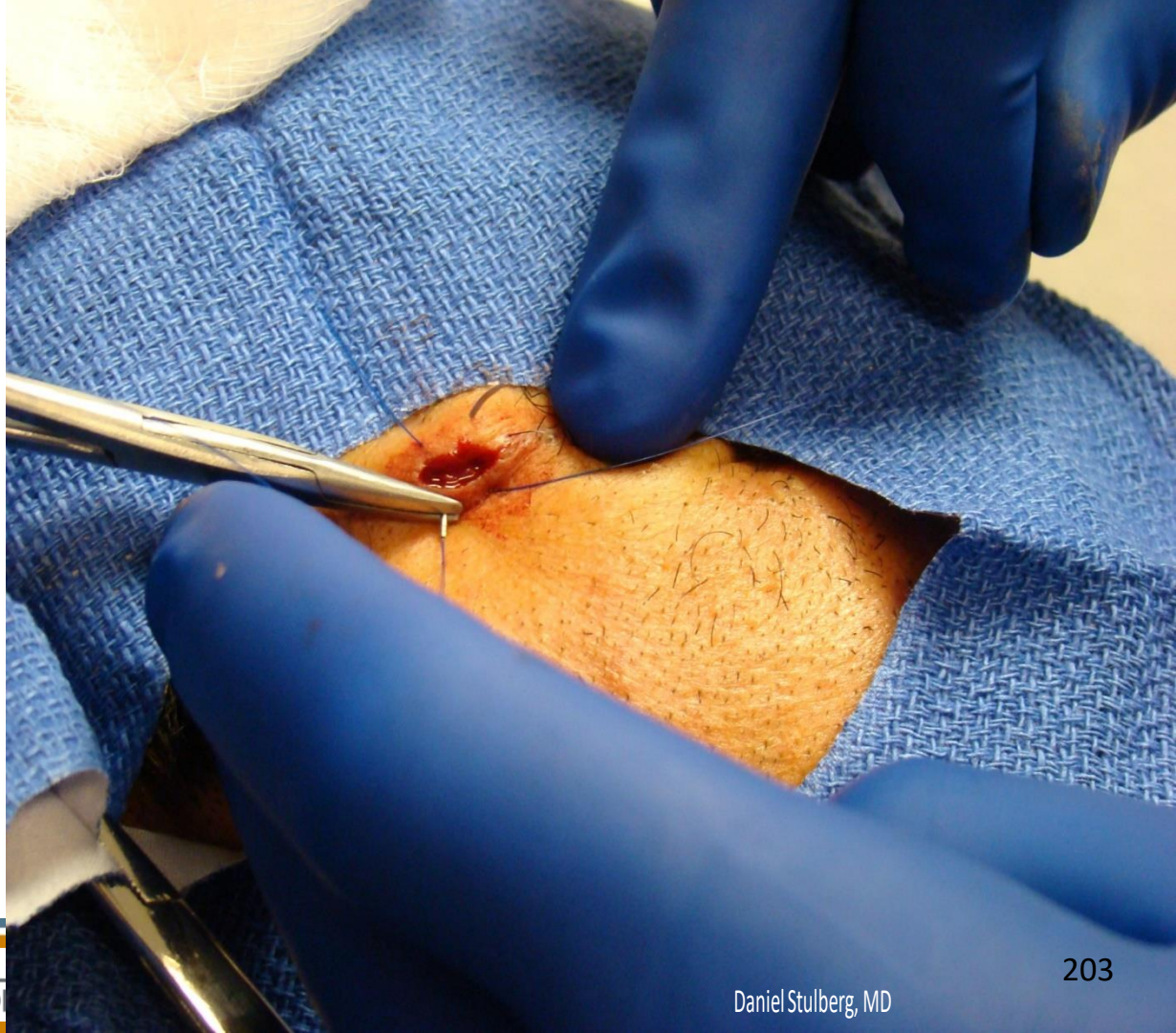

SCHOOL OF MEDI

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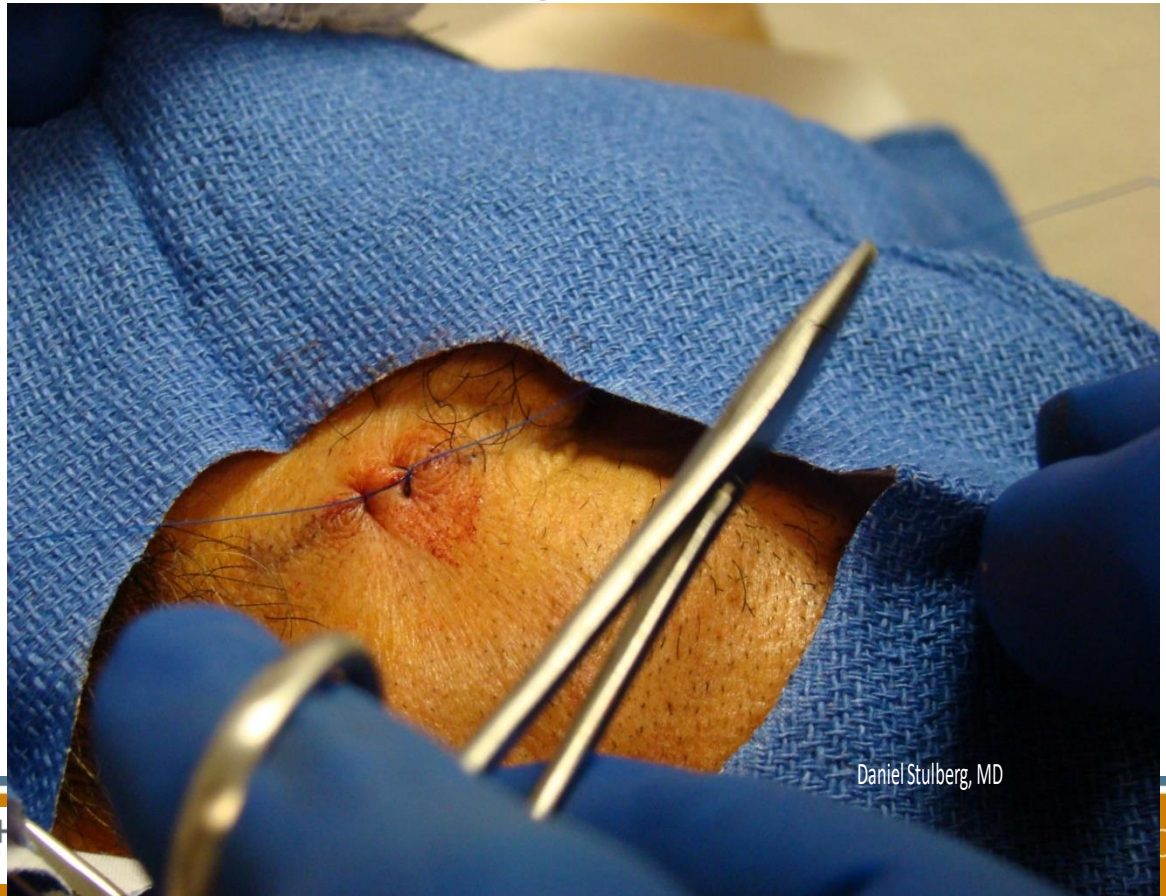
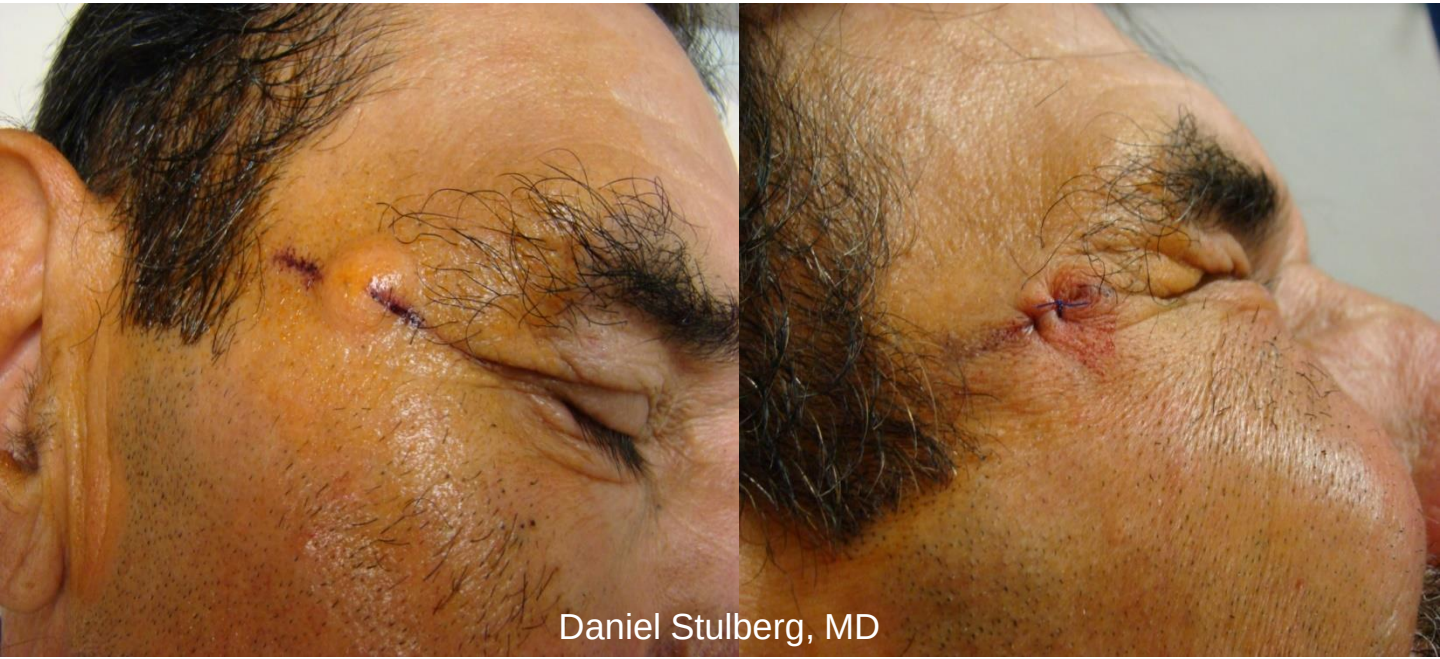
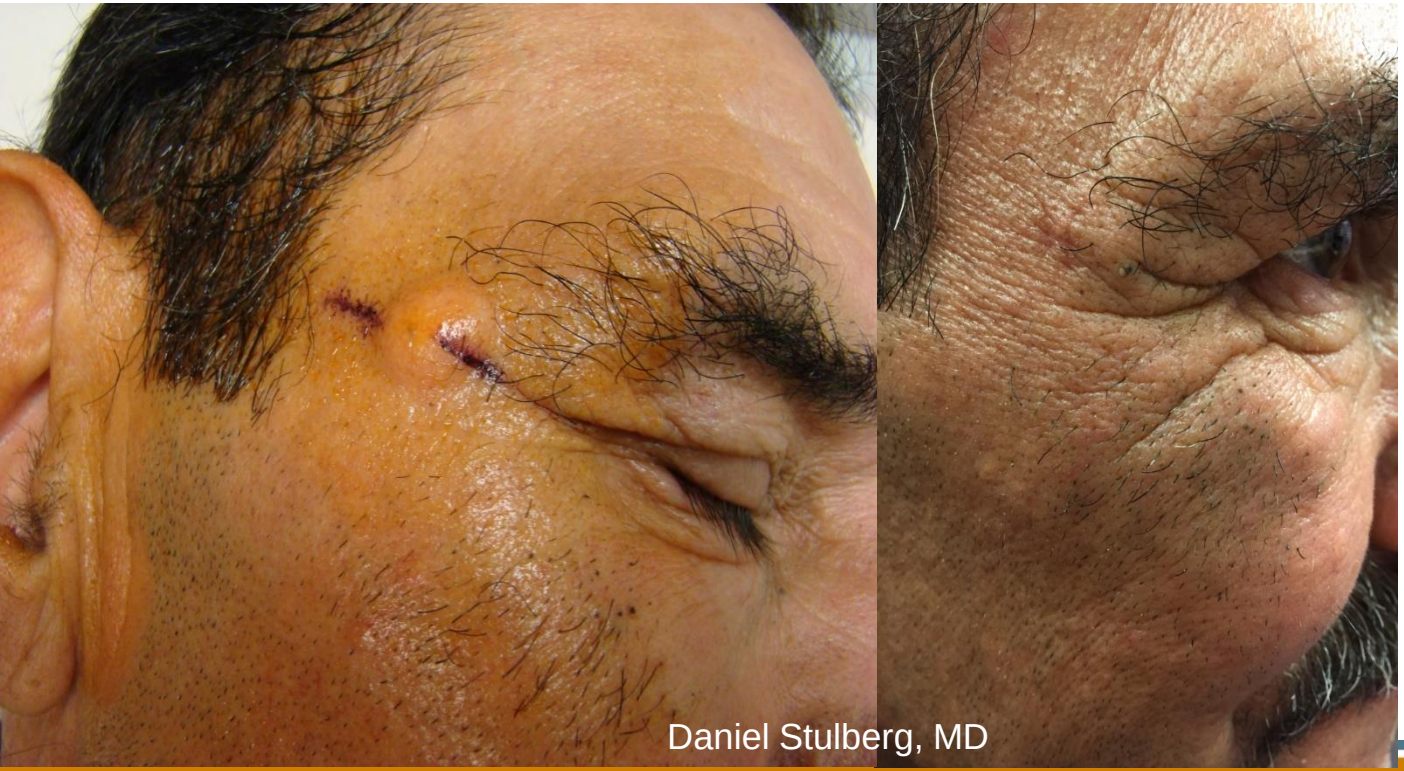
Inverted Figure 8 suture



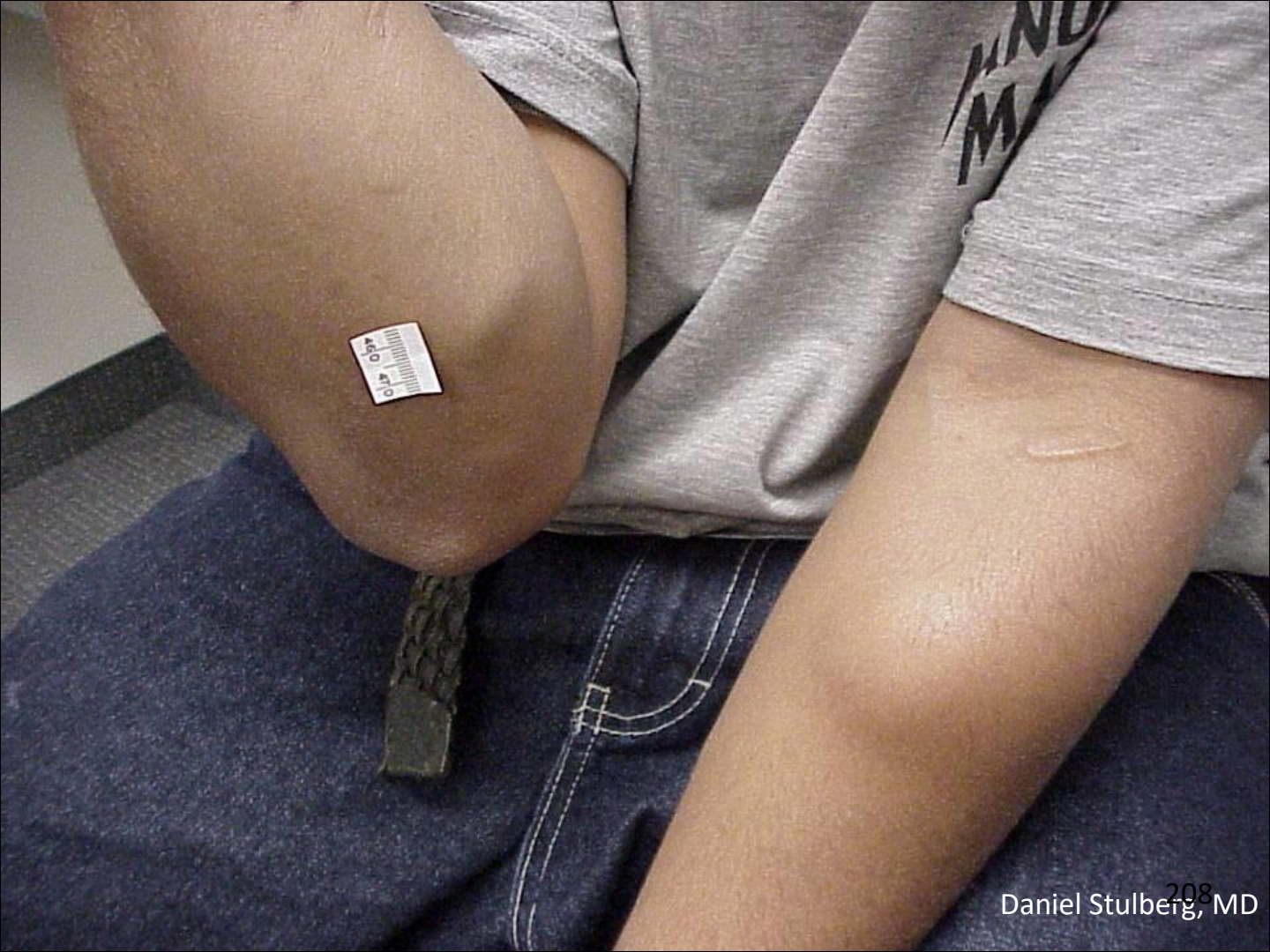
Before and after



Healing phase



Subcutaneous Mass



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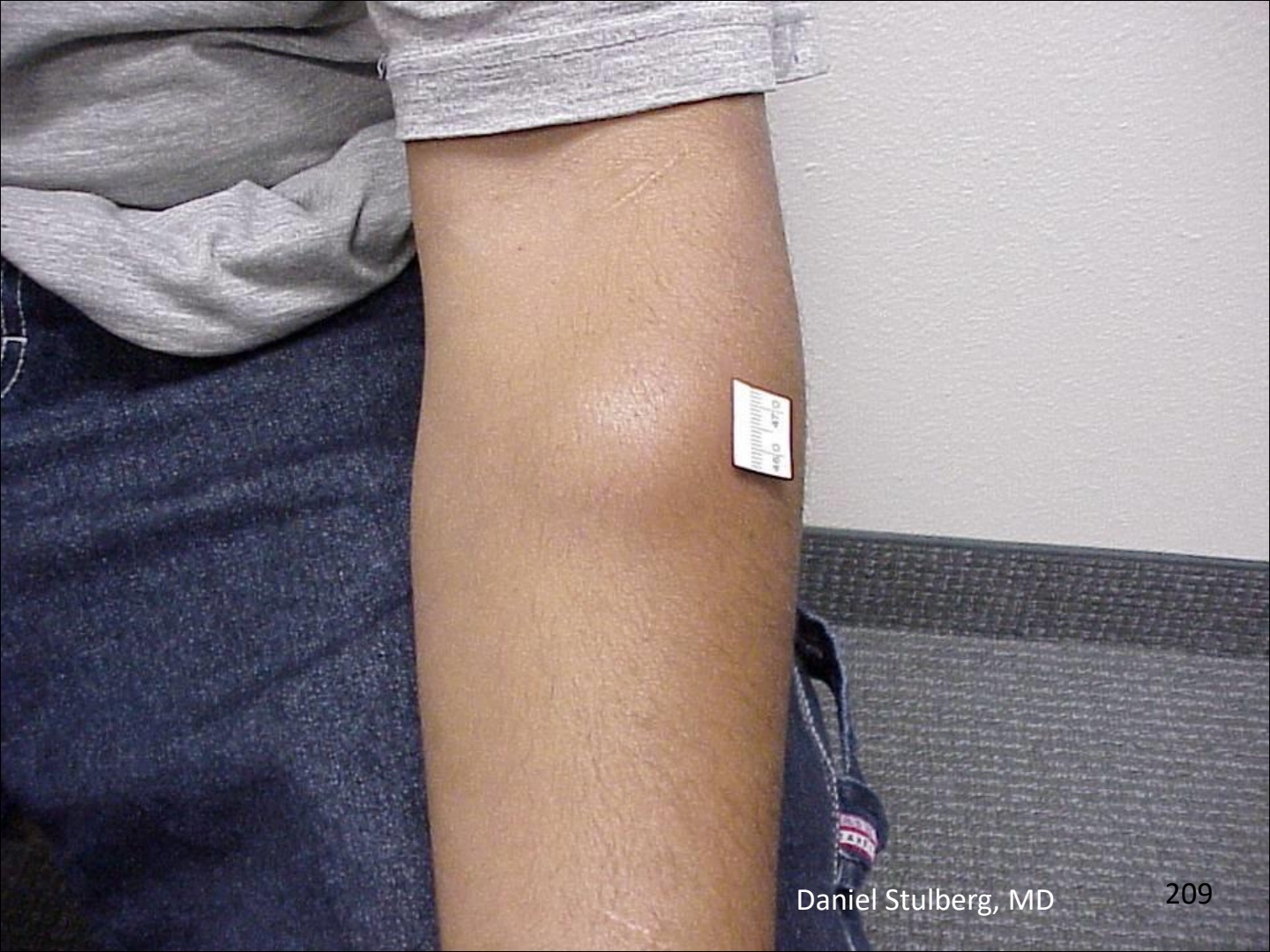

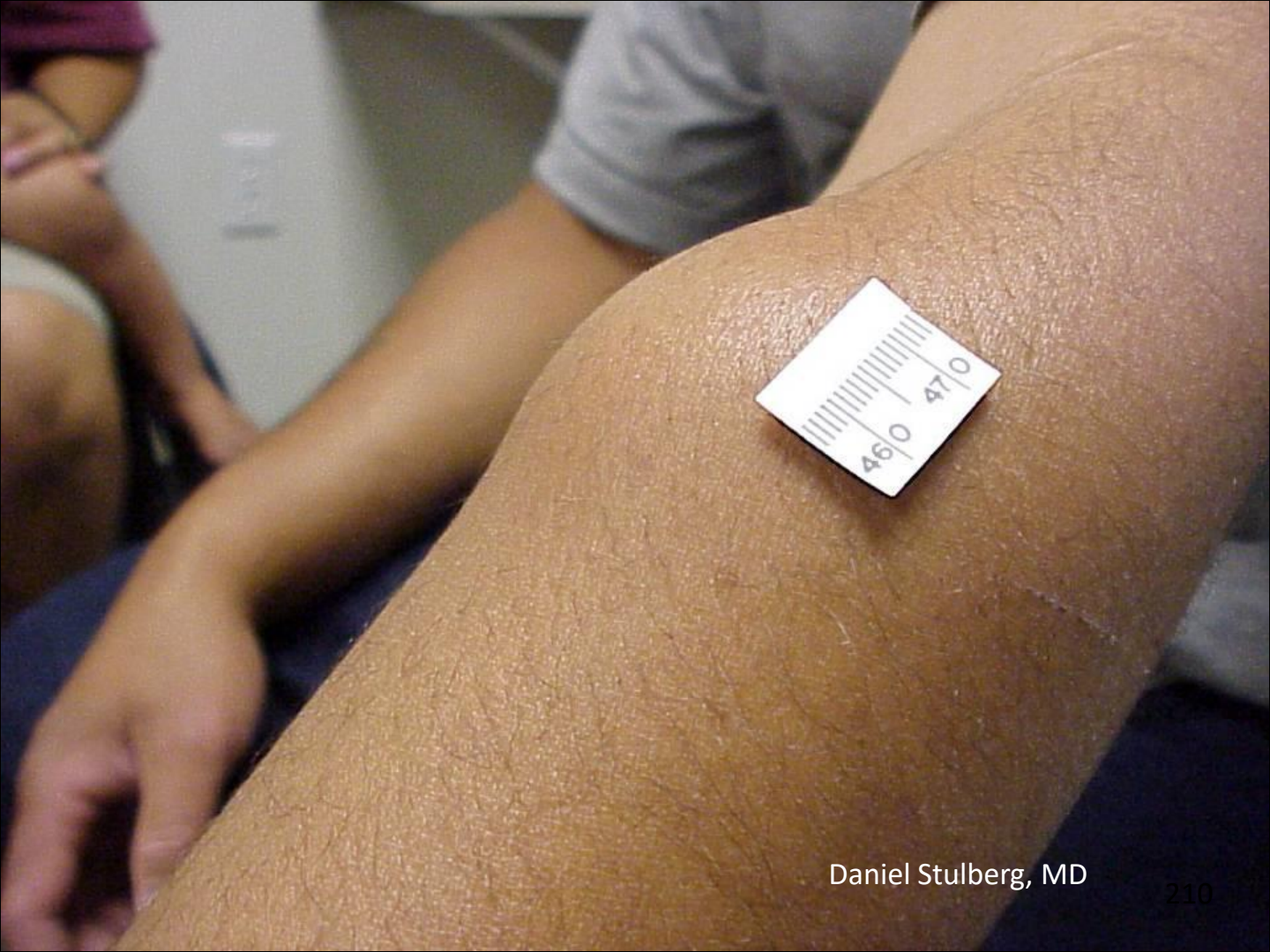

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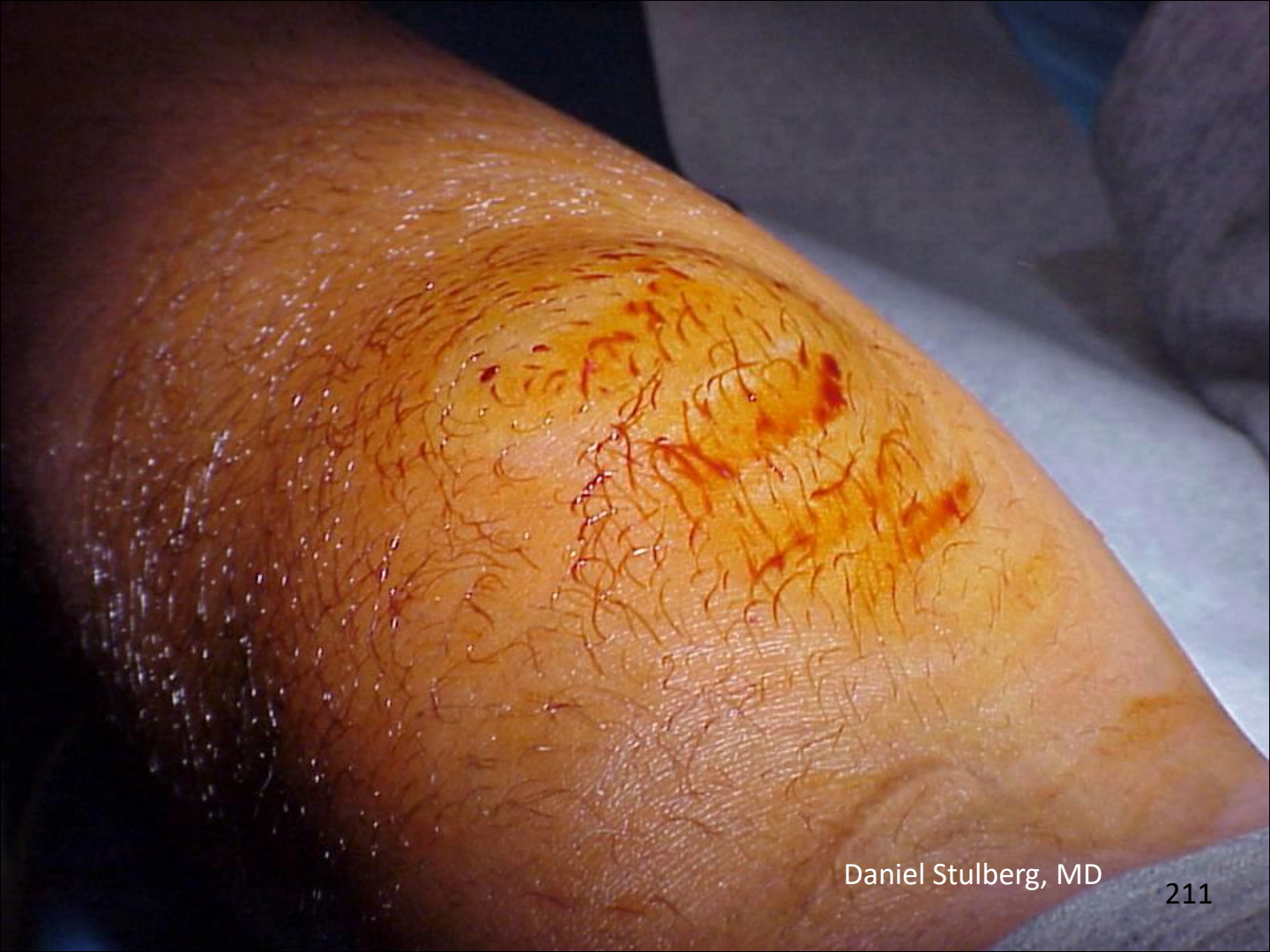
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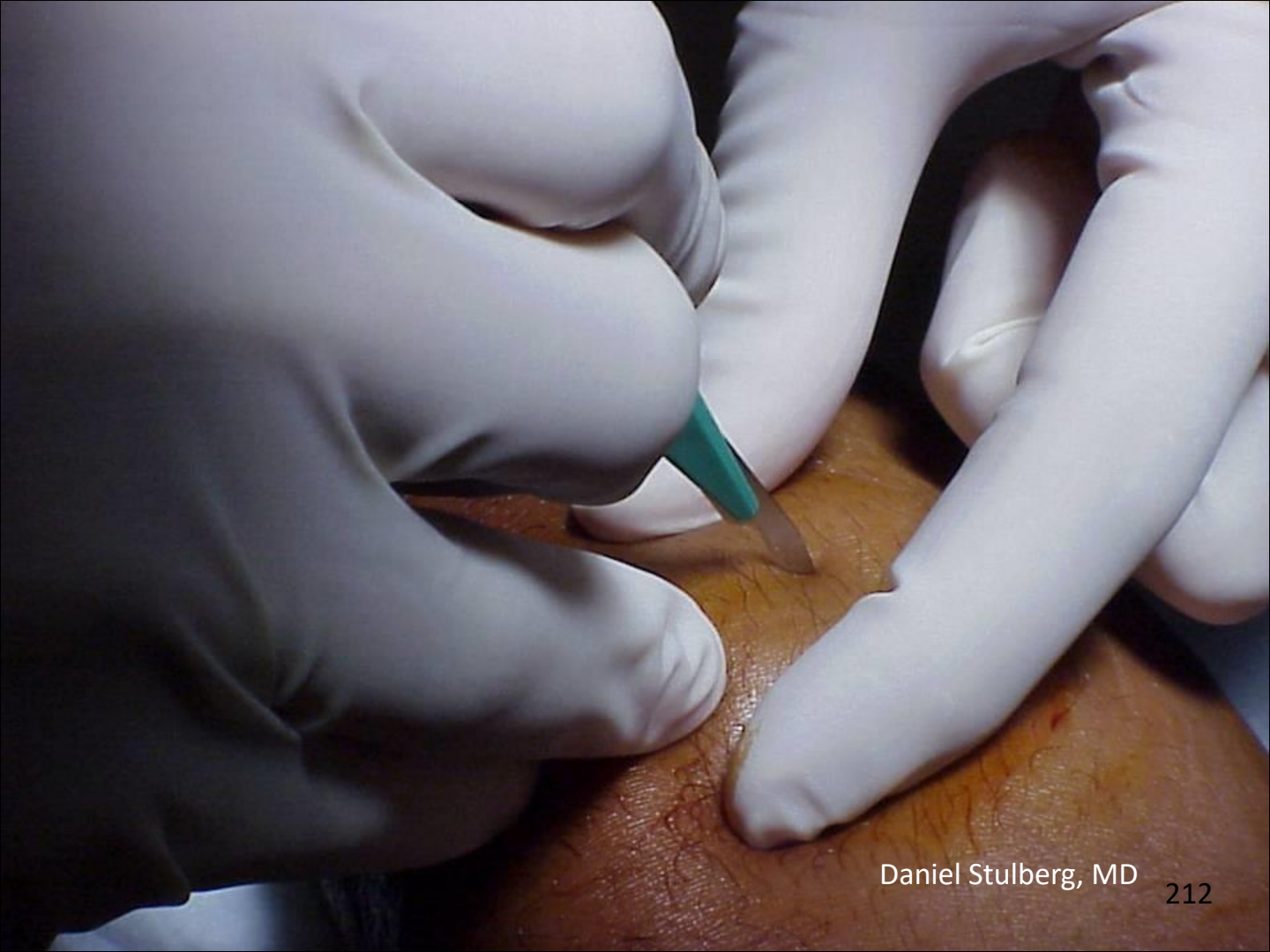
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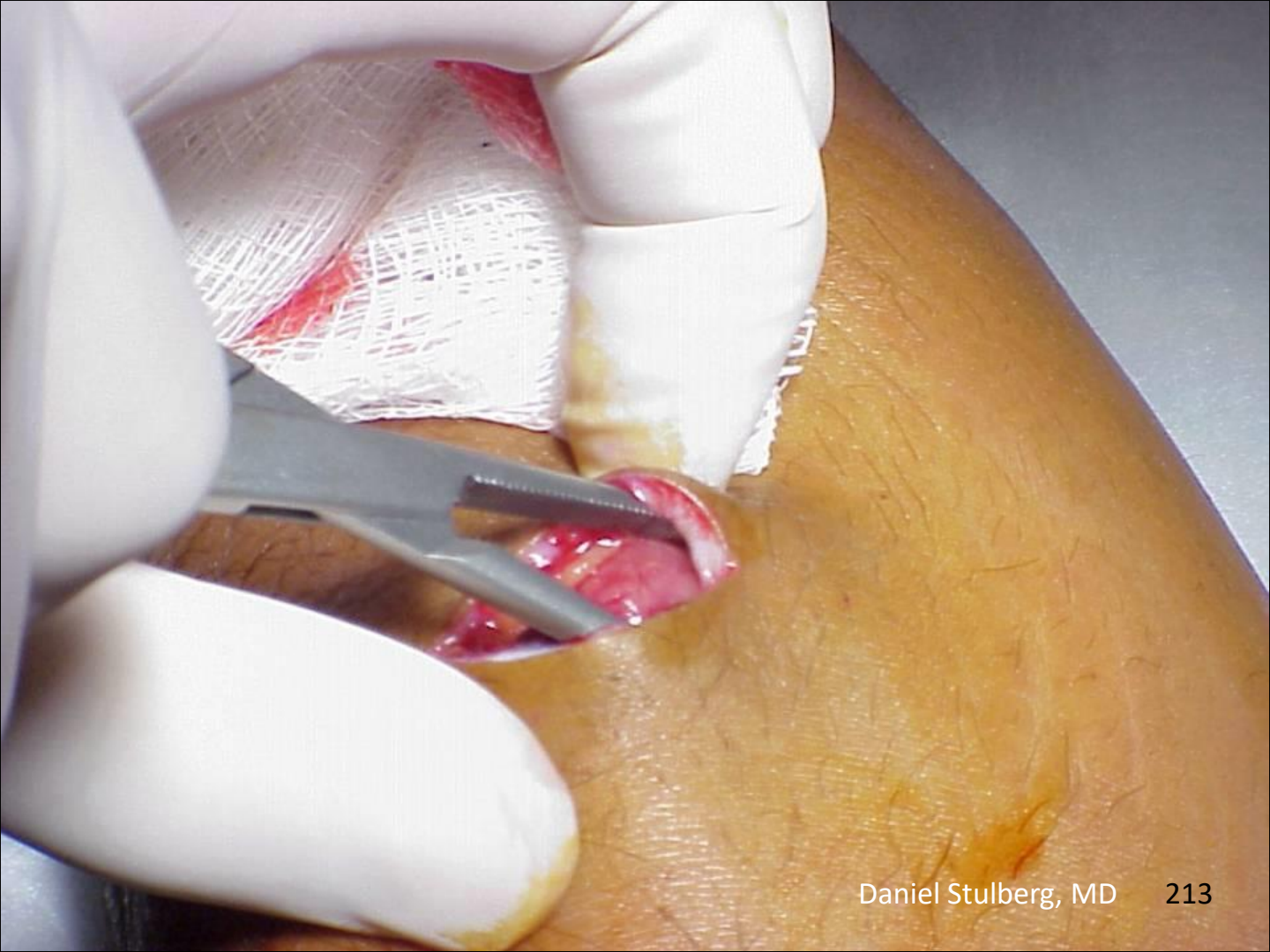
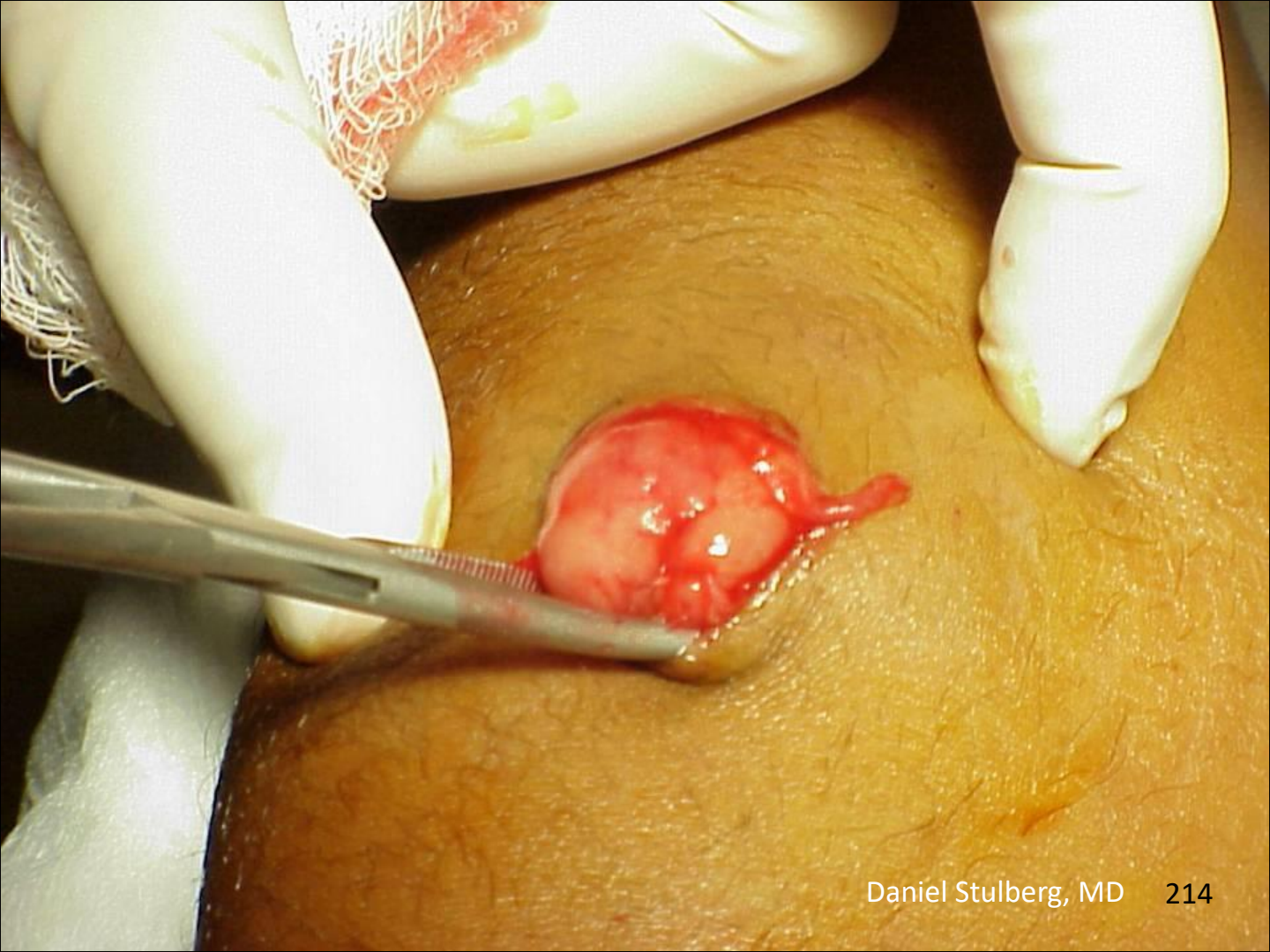
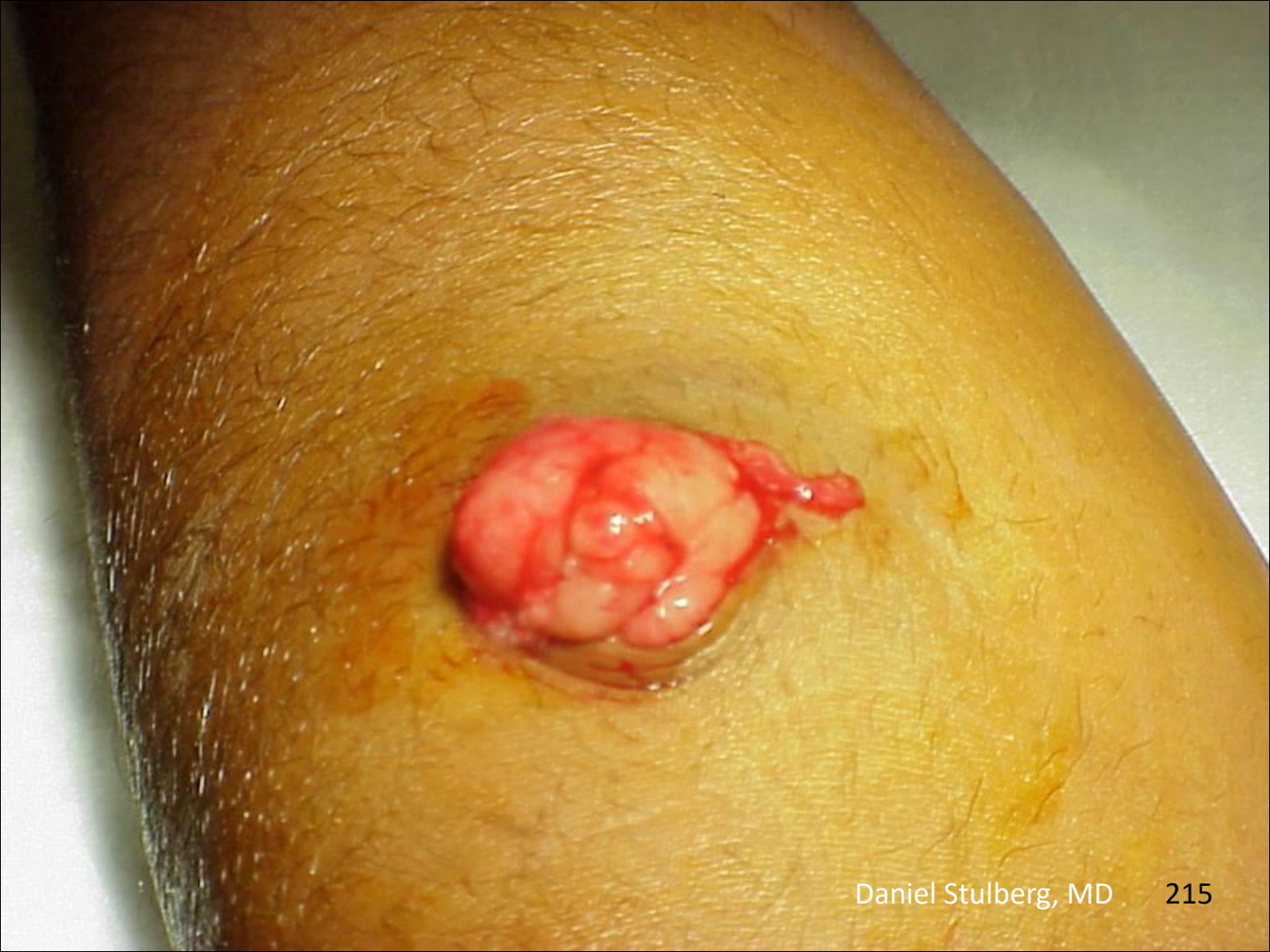
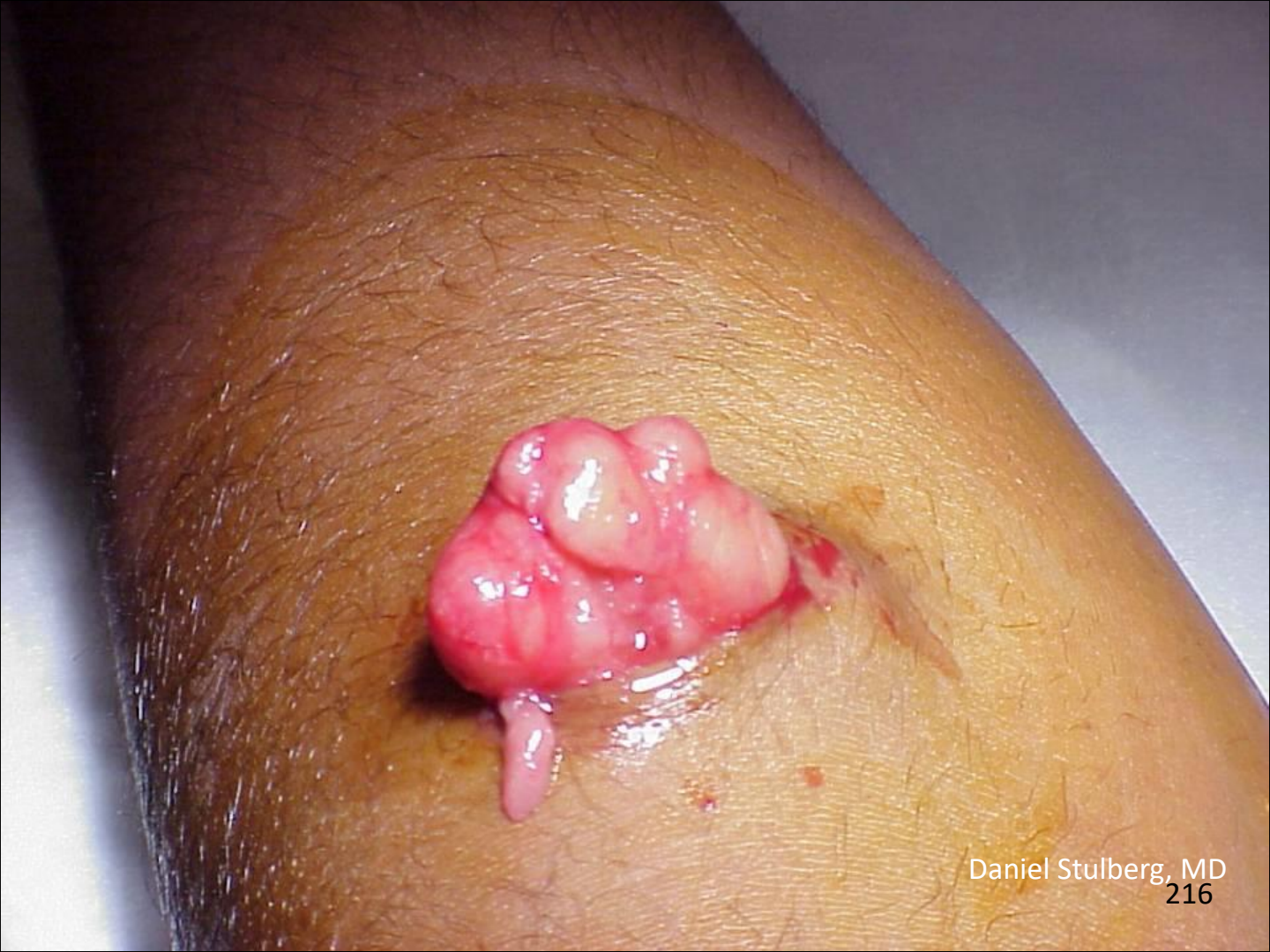

Daniel Stulberg, MD 213



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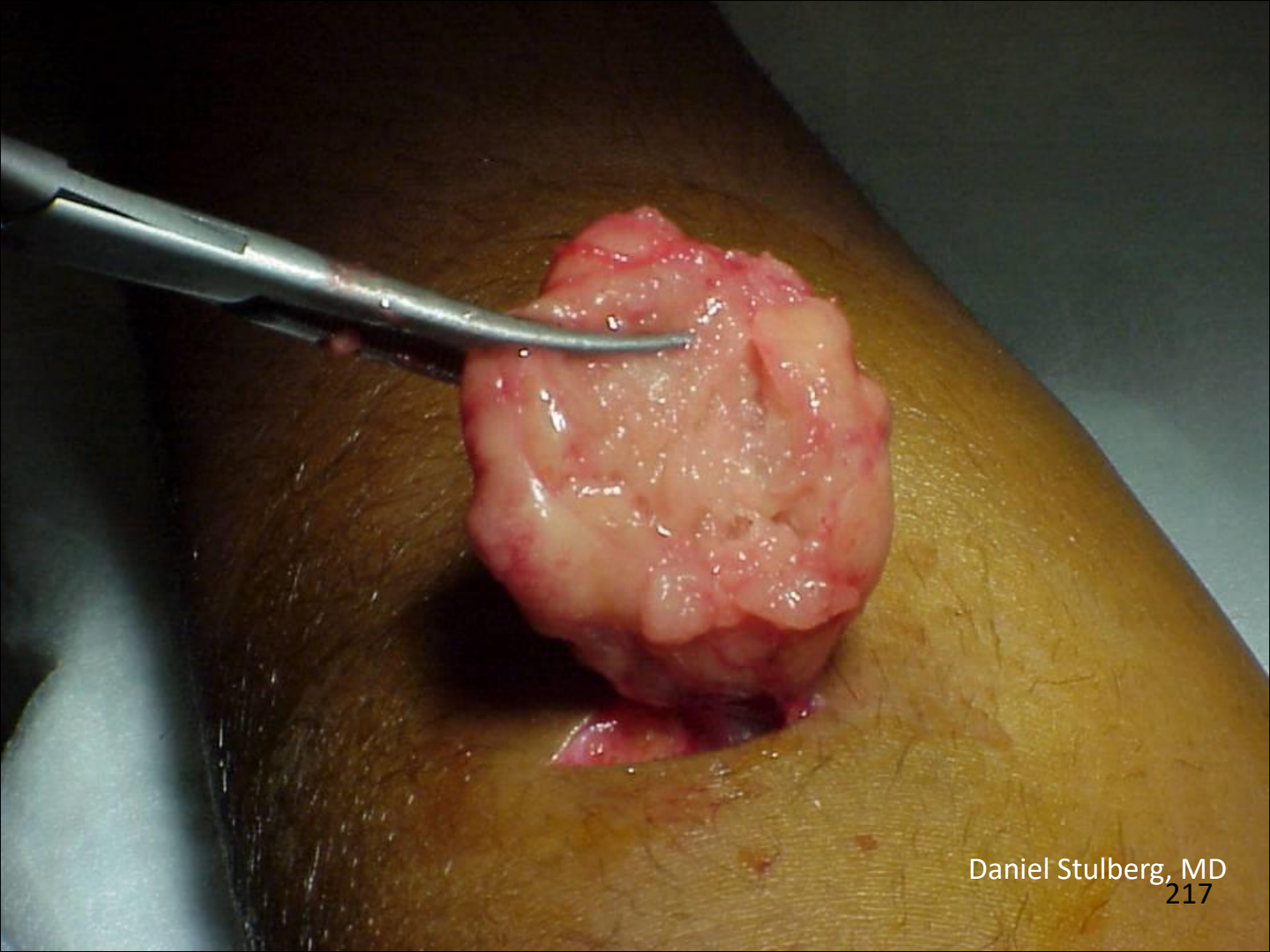
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Resources

- Usatine R, Pfenninger J, Stulberg D, Small R. Dermatologic and Cosmetic Procedures in Office Practice. 2012. With DVD.
  - App available at: www.usatinemedia.com
- Robinson, et al. Surgery of the Skin. 2010.
- Mayeaux EJ, The Essential Guide to Primary Care Procedures. 2009.

Thank you! & Cryo lending library

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