Skin Biopsy

Before the Procedure

1. Body Location - photograph lesion Generally avoid face, genitals, hands, feet in the IMC

2. Obtain Verbal or Written Consent

3. Punch vs Shave

Shave	Punch
Skin Tags	Any lesion that has
Seborrheic keratoses	possibility for melanoma
Actinic keratoses	Vesiculobullous lesions
Nevi without any possibility	(sample edge to include
of melanoma	normal tissue)
Small basal cell carcinomas	

4. Decide on need for suture

Shave Biopsy: No suture necessary

Punch Biopsy:		Suture Size:	
3mm Punch	No Suture	Thick Skin (e.g. back)	3-0 Suture
4mm Punch	+/- suture	Face	5-0 Suture
5mm Punch	Needs Suture	Rest of Body	4-0 Suture

During the Procedure

1. "Time-out" protocol to verify side and site of biopsy

2. Prepare biopsy site with alcohol

Sterile technique if sutures are intended, otherwise non sterile gloves can be used.

3a. PUNCH Biopsy: Obtain Specimen

- Place ring of anesthesia around (field block) or deep to lesion.
- Stretch skin perpendicular to skin tension lines.
- While skin is stretched, push unit vertically into the skin and rotate it back and forth to cut through the skin to the subcutaneous fat.
- A decrease in resistance should be felt at the point where the dermis is completely penetrated.
- Withdrawal punch.
- Push down with the fingers on each side of biopsy. The plug should pop up if tissue has been adequately freed.
- Lift specimen with forceps (or can use needle to avoid tissue maceration) and cut the subcutaneous base with scissors.

5. Equipmen

In Pyxis MedStation (ask nursing for help)
Local anesthetic (0.5-1.0ml of 1% Lidocaine +/- EpinephrinHemostatic agent- Aluminum Chloride 20%
In Supply Cabinet Nonsterile gloves (sterile gloves if sutures are to be placed) Alcohol wipes Cotton Tipped applicator Specimen container * (see back of sheet) Dressing: Petrolum jelly Pressure dressing: 2x2 gauze + Bandaid ER Laceration Tray: Fenestrated Drape Towels Ax4 inch gauze x 10 10ml Syringe Needle Holder Forceps 2x2 inch gauze x 5 Needles: 18G, 25G, 27G Medicine Cup
ScissorsHemostats
If Punch Biopsy: 3mm, 4mm, or 5mm Punch Suture (per Step 4)
If Shave Biopsy: DermaBlade

- Apply pressure for hemostasis.
 - Can use Aluminum Chloride in most cases. AVOID use if wound is to be closed with suture.
- Suture if needed.
- Apply small pressure dressing:
 - Folded 2x2 glaze under a bandage.

3b: SHAVE Biopsy: Obtain Specimen

- Instill local anesthetic within the dermis underneath the lesion.
- Excise by shaving with DermaBlade:
 - Hold DermaBlade between thumb and index finger of dominant hand.
 - With other hand, tent the area to be biopsied.
 - Gently shave under the lesion with slow rocking motion.
- Apply pressure for hemostasis.
- Instill aluminum chloride into small cup. Then use cotton tip applicator to apply agent to wound bed.
- Apply small pressure dressing:
 - Folded 2x2 glaze under a bandage.

After the Procedure

Aftercare Instructions for Patient

- Clean site with soap and water twice a day. After drying, apply petroleum jelly to aid healing.
 - Moist healing environment with petroleum jelly is essential to decrease likelihood of scarring.
 - Keep covered for next few weeks to avoid UV rays if possible
- If sutures placed:
 - Need follow-up appointment to remove in 10-14 days.
 - If suture on face, need to remove in 7 days.

Add Dot Phrase to after visit summary (AVS) for patient instructions

- .IMCSKINBXCARF

Place Order in EPIC: "Surgical Pathology"

"7 D's" to include in comments order for pathologist:

- 1. Demographics (age, location of lesion)
- 2. Diseases (other diseases that patient has, e.g. lupus)
- 3. Duration (how long it has been present)
- 4. Drugs applied to lesion (e.g. steroids) or taken by patient that should change the appearance of lesion
- 5. Description (e.g. papular, vesicular, hyperkeratotic)
- 6. Diameter
- 7. Diagnosis suspected.

Document Procedural Note within office note

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Add Billing Code (discuss with attending)

Use Charge Capture Feature in EPIC:

Wrap Up -> Charge Capture -> Type in appropriate Code per below

- 11102 Tangential biopsy of skin (e.g. **shave**, scoop, saucerize, curette), single lesion
- 11103 Each additional lesion
- 11104 **Punch** biopsy of skin (including simple closure, when performed), single lesion
- 11105 Each additional lesion

* Which specimen jar to use?

- 1. You will ALWAYS send a specimen in 10% Neutral Buffered Formalin for histology.
- 2. If taking a biopsy of a bullous or vesicular rash, you will ALSO need to send a specimen for direct immunofluorescence in either:
- preferred: call pathology (*53678) and request that they send special transport media over to IMC (e.g. poly transport buffer, Histocon, or Michel's Transport Media).
- if unable to do above: place specimen on saline moistened gauze in sterile cup (e.g. urine specimen cup). Call lab so that it gets immediate attention when sample arrives.



Scan QR code with smart phone camera to access NEJM procedural video on punch biopsy Source:

Levitt J, et al. How to Perform a Punch Biopsy of the Skin. *NEJM*. 2013; 396(11) e13.

Grant C. Fowler. Pfenninger & Fowler's Procedures for Primary Care. 4th Edition. Elsevier 2020.