

Prepared by: Steve Brown	SOP – SKIN BIOPSY COLLECTING
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PURPOSE:

To establish a standard operating procedure for collecting a skin biopsy for tissue culture.

EQUIPMENT:

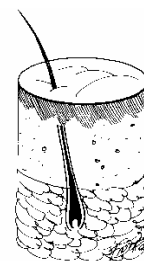
- 30 gauge needle
- Sterile punch
- Iris scissors
- Skin hook
- Toothed forceps (Adson)
- 4 x 4 gauze

RESPONSIBILITY:

Medical doctor

PROCEDURE:

The punch biopsy is a fast, easy, inexpensive method for producing a cylinder of tissue from the skin surface to the underlying subcutaneous fat.

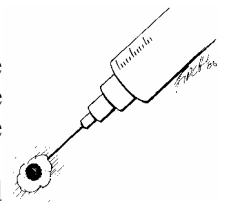


1. Preparation

The skin should be prepped with chlorhexidine (Hibiclens), povidone iodine (Betadine, Isodine), or alcohol. This is performed as a clean procedure, and full sterile technique with sterile drapes is unnecessary. Local anesthesia with lidocaine will be used at patient's request.

1.1 One percent lidocaine with epinephrine is injected via a 30 gauge needle and Luer-Lok syringe, about 50ul on each side of the planned biopsy site.

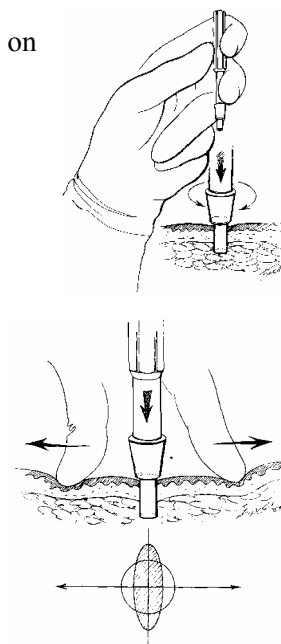
- Step 1. Using a 30 gauge needle, inject about 50ul into the dermis on each side of the biopsy site.
- Step 2. Wait 5 minutes for the epinephrine effect.



2. Punch

2.1 The 2mm punch should be disposable.

- Step 1. The punch is held between the first and second fingers to aid in the twisting action necessary for a clean punch.
- Step 2. With the skin held taut, the sharp steel cutting edge of the cylinder is pressed down firmly against the lesion, and simultaneously twisted one way and then the other in quick succession.
- Step 3. As the punch traverses the dermis into the subcutis, resistance is lost, and there is a slight “give.”
- Step 4. The specimen should be handled delicately with a needle, and elevated and trimmed at its base with iris scissors. Alternatively, it may have separated spontaneously and be sitting in the steel cylinder chamber.
- Step 5. Before punching the lesion, consider the orientation most desirable



for closure. An elliptical defect is much easier to close cosmetically than a circular one. The circular defect normally produced by a punch excision may be rendered elliptical by applying tension to both sides of the lesion immediately before and during the punch excision. Apply a sheering tension across the lesion with the thumb and first finger, at right angles to the relaxed skin tension lines. As the elastic skin recoils, the once circular defect will align itself in an orientation ideal for closure.

Step 6. Bleeding will resolve with pressure.

Step 7. Apply bandage. No sutures are necessary for a 2mm biopsy punch.