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## Communications

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# Use of Turkey Skins for Surgical Teaching

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Family practice residents may lack sufficient clinical opportunity to gain surgical experience beneficial to a physician in family medicine. This presents a number of educational problems, primarily in areas of training for technical and procedural expertise. Laceration suturing, biopsy procedures, and scar revisions are often currently performed in the Emergency Room where close supervision is not always possible. Yet the knowledge of proper suturing and biopsy techniques is essential for family physicians in most practice settings.

In order to expand their experience in skin suturing and biopsy techniques, family practice residents at Deaconess Hospital, Milwaukee, Wisconsin, have found a skin to use as an acceptable substitute for human skin. After reviewing the various types of skins available in most hospitals, the skin from the breast of a large turkey was selected because of its close approximation to human skin in thickness, elasticity, and sub-

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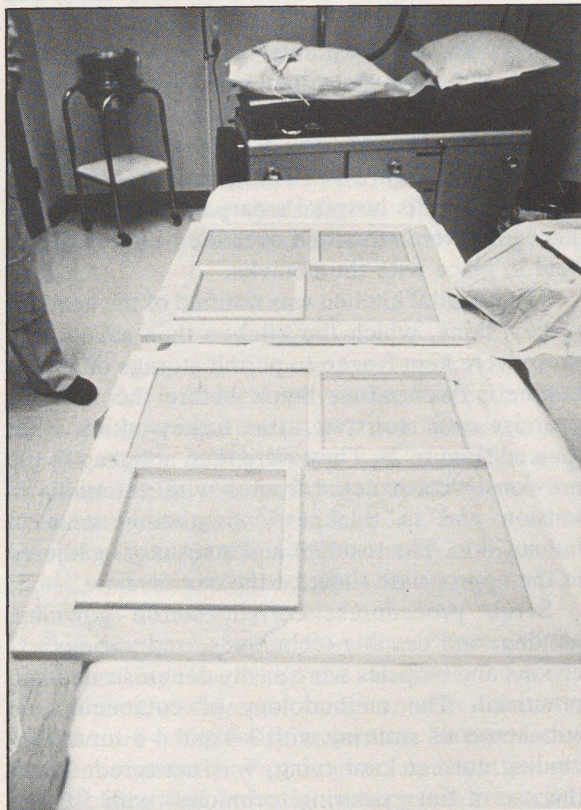


Figure 1. Teaching Frames





Figure 2. Thawing of Turkey Skin

cutaneous fat. Most hospital kitchens can readily supply this skin if the request provides ample delivery time. Under the direct supervision of a surgeon, many surgical techniques can be actively demonstrated, discussed, and practiced. With this initial experience in handling tissues and using proper instruments, further experience is then gained with actual patients.

The technique developed involves construction of large frames with a pasteboard backing, each measuring two by two and a half feet in outside dimensions (Figure 1). These frames were constructed by this hospital's carpentry department. The skins were stretched over the pasteboard and held in place with thumbtacks.

The hospital kitchen was notified of the need for turkey skins, which the kitchen then saved, and these were kept frozen to permit storage of a large number. Twenty-four hours before the teaching exercise was to start, the turkey skins were thawed (Figure 2). They were then attached to the previously constructed frames with variations in tension and in thickness, simulating areas of human skin. The resident and instructors gathered at the appropriate time for the exercise.

Scrub procedures, correct sterile gowning, gloving, and draping techniques, and various excisions and biopsies were easily demonstrated and practiced. The methodology of cutaneous and subcutaneous suturing with 3-0 and 4-0 suture, including correct knot tying, was mastered. Then, the use of finer suturing techniques with 5-0 and 6-0 suture was learned. Dog ear removal, scar revision, Z-plasties, and proper assisting at surgery

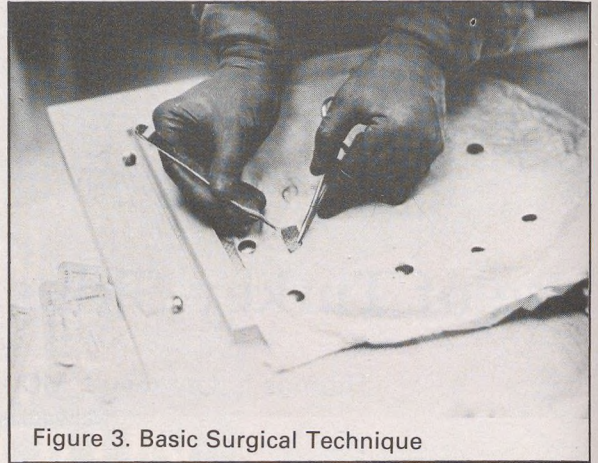


Figure 3. Basic Surgical Technique

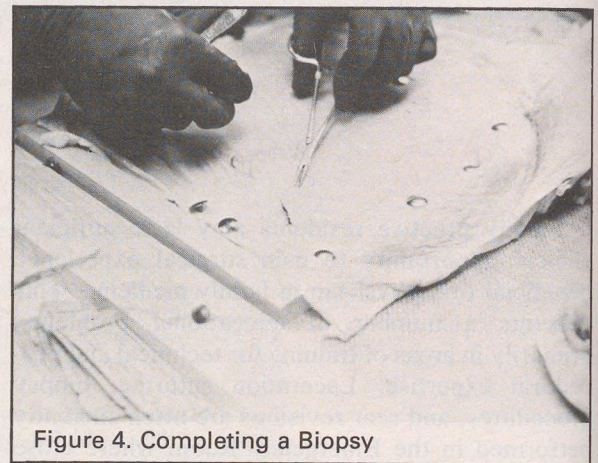


Figure 4. Completing a Biopsy

were also demonstrated and practiced (Figures 3 and 4). Other uses not evaluated in our initial exercises included the testing of new equipment, especially new suture material that becomes available on the market, and the practicing of skin graft techniques and punch biopsy techniques.

Through this type of training, under adequate supervision, family practice residents are able to gain the necessary experience to both perform and judge their own surgical ability. Nothing can replace actual patient care, but this type of experience can allow the family practice resident time to learn and practice under direct supervision many surgical techniques which simulate actual problems. These exercises can be scheduled as often as necessary until residents gain the confidence in the art of skin surgery that will be required of them as they help patients in the practice of family medicine.