#### **SUTURING**

#### **Wound Closure**

A well-closed wound has three characteristics: the margins are approximated without tension, the tissue layers are accurately aligned, and dead space is eliminated.

## **Suture Techniques**

# 1. Simple Interrupted Stitch

- 1. A simple interrupted stitch is placed by passing the needle through the skin surface at right angles, placing the suture as wide as it is deep.
- 2. The goal is to place sutures that slightly evert the edge of the wound
- 3. This maneuver produces a slightly raised scar that recedes during the remodeling stage of healing and leaves a smooth scar

### 2. Vertical or Horizontal Mattress Suture

1. The vertical mattress suture promotes eversion and is useful where thick layers are encountered or tension exists.

# 3. Intracuticular Running Suture

- The intracuticular running suture, utilizing a nonabsorbable suture, can be used where there is minimal skin tension.
- It results in minimal scarring without suture marks.
- Controlled tissue apposition is difficult with this method, but it is a popular technique because of the cosmetic result.

### 4. Three-Point Mattress Suture

The three-point or corner stitch is used to minimize the possibility of vascular necrosis of the tip of a V-shaped wound.

# 5. Running or Continuous Stitch

- The running stitch is useful in situations where speed is important (e.g., a field emergency) because individual knots do not have to be tied.
- ★ It is appropriate for use on scalp lacerations especially, because it is good for hemostasis

## **Alternatives to Suturing**

## **Staples**

Typically, staples are used on the skin in wounds that would be closed in a straight line. The skin is closed with staples after other layers are closed by suturing.

#### **Adhesives**

- The most commonly used tissue glues are related to cyanoacrylate ester known as Super Glue. Tissue glues for superficial wounds have the advantage of rapid closure, minimal physical and emotional trauma to the patient, and absence of a foreign body in the wound
- Histoacryl Blue, a.k.a. Derma bond, has been commercially available in Canada since 1975, and in the United States since 1998.