

Atelier de réparation de plaie de base

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Objectifs d'apprentissage

- Choisir le type d'anesthésie locale et de fil adéquat
- Réaliser une anesthésie locale
- Maîtriser le point simple, matelassé horizontal et le plan profond

Choisir le type d'anesthésie locale

Choisir le type d'anesthésie locale



Avec ou sans épinéphrine ?

Avantages

- Améliore l'hémostase locale
- Augmente la durée de l'anesthésie
- Augmente la quantité d'anesthésique utilisable

Désavantages

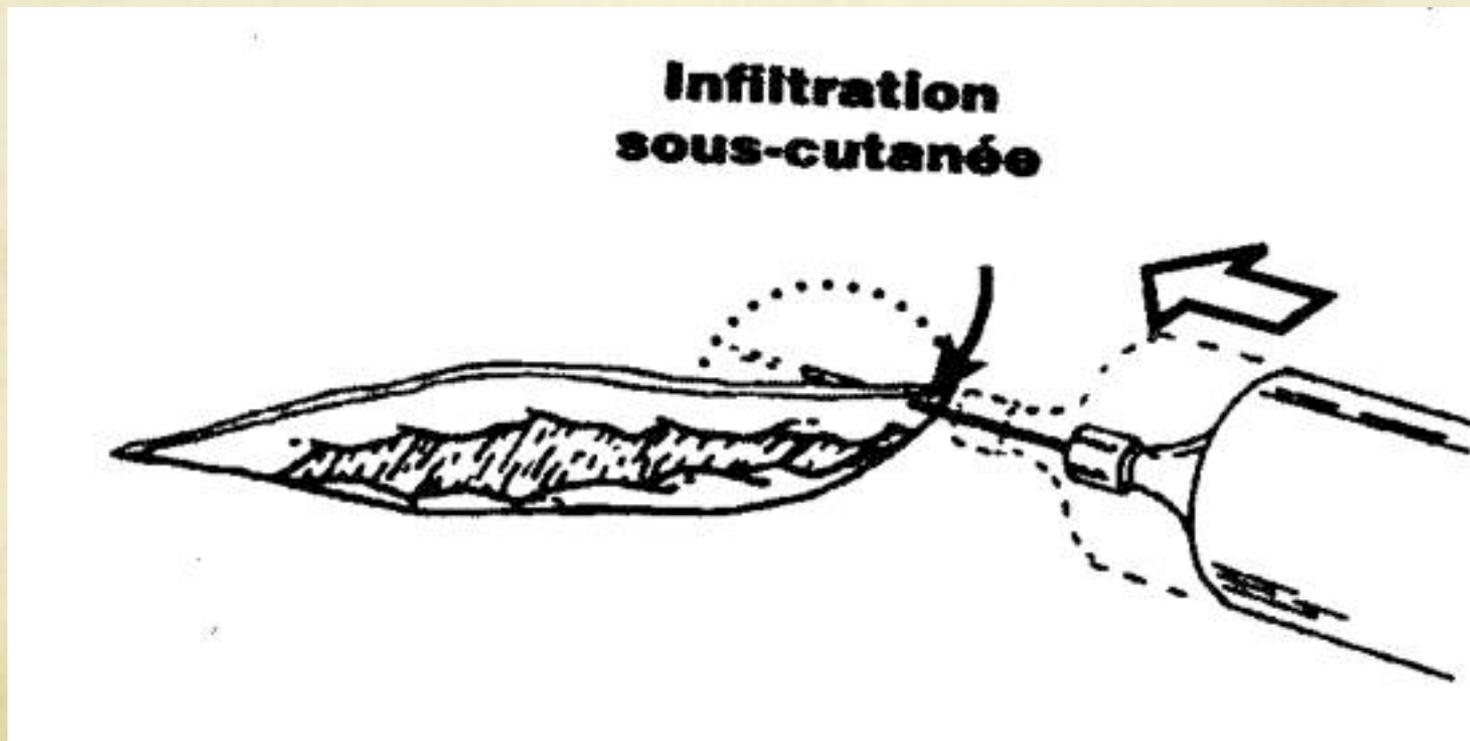
- Augmente la douleur d'infiltration
- Augmente l'inflammation
- Augmente le taux d'infection
- Danger d'ischémie lambeaux et extrémités
- Effets secondaires cardiovasculaires possibles

Dose maximale d'anesthésique

- Lidocaïne en injection sous-cutanée
 - Sans épi : 5 mg/kg
 - Avec épi : 7 mg/kg
- Exemple pratique
 - Patient de 10 kg
 - Dose max sans épi (en mg) = $5 \times 10 = 50$ mg
 - Lidocaïne 1% : $1\text{g} / 100 \text{ ml} = 1000\text{mg} / 100\text{ml} = 10\text{mg/ml}$
 - Donc dose max = 5 ml

Techniques pour diminuer la douleur liée à l'anesthésie locale

- Injecter dans les bords de la plaie et non à travers la peau saine



Techniques pour diminuer la douleur reliée à l'anesthésie locale

- Injecter en s/c et non en intra-dermique

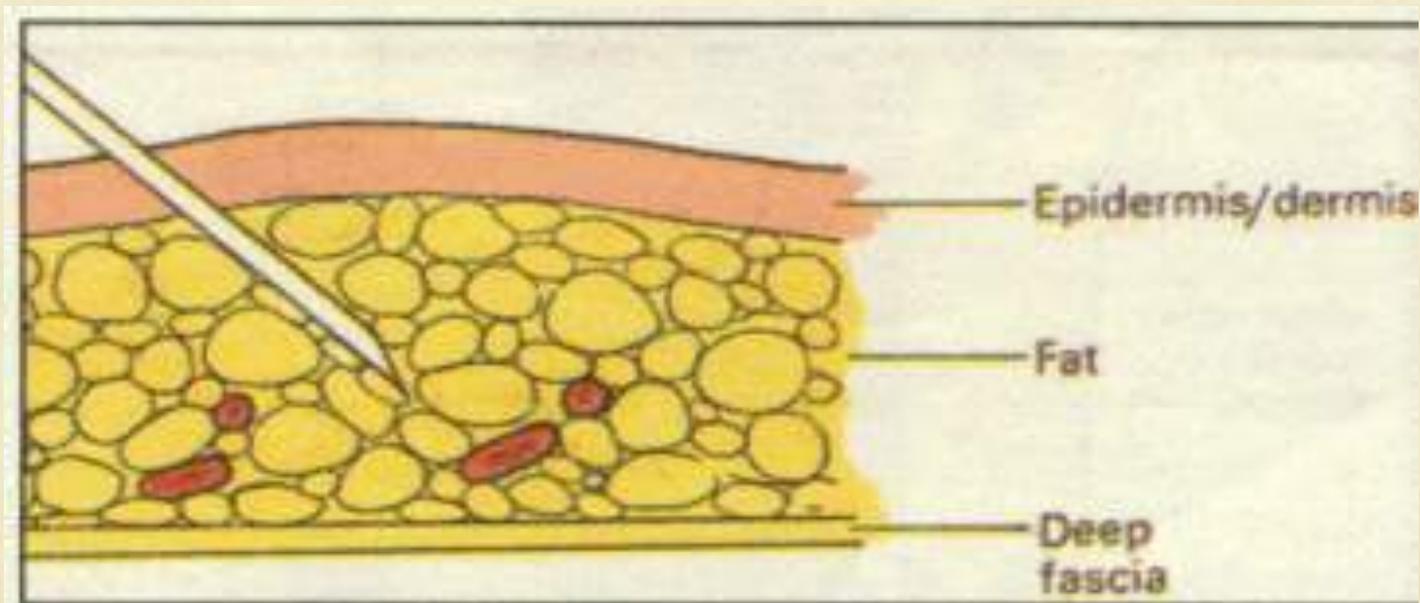
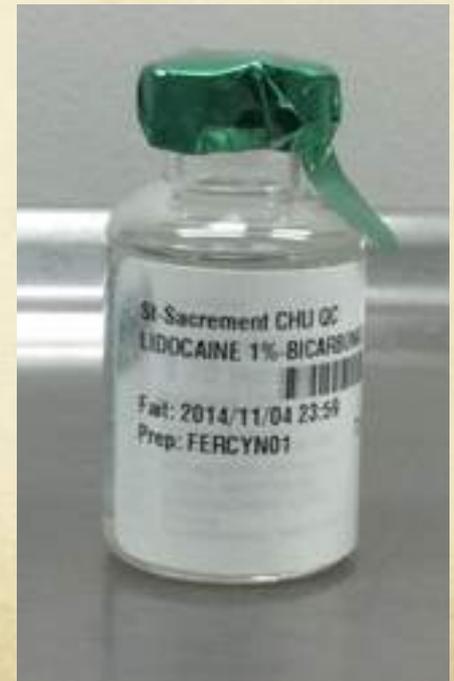


Figure 1: The plane of injection.

Techniques pour diminuer la douleur reliée à l'anesthésie locale

- Utiliser une aiguille de petit calibre (25G-30G)
- Injecter lentement (0,1 ml/sec)
- Laisser agir
- Utiliser techniques de distraction
- Réchauffer la solution (37°C)
- Tamponner la solution



Choisir le type de fil

Table 11-1 Suggested Guidelines for Suture Material and Size for Body Region

Body Region	Percutaneous (Skin)	Deep (Dermal)
Scalp	5-0/4-0 Monofilament ¹	4-0 Absorbable ²
Ear	6-0 Monofilament	—
Eyelid	7-0/6-0 Monofilament	—
Eyebrow	6-0/5-0 Monofilament	5-0 Absorbable
Nose	6-0 Monofilament	5-0 Absorbable
Lip	6-0 Monofilament	5-0 Absorbable
Oral mucosa	—	5-0 Absorbable ³
Other parts of face/forehead	6-0 Monofilament	5-0 Absorbable
Trunk	5-0/4-0 Monofilament	3-0 Absorbable
Extremities	5-0/4-0 Monofilament	4-0 Absorbable
Hand	5-0 Monofilament	5-0 Absorbable
Extensor tendon	4-0 Monofilament	—
Foot/Sole	4-0/3-0 Monofilament	4-0 Absorbable
Vagina	—	4-0 Absorbable ³
Scrotum	—	5-0 Absorbable ³
Penis	5-0 Monofilament	—
1. Nonabsorbable monofilaments		
Nylon:	Ethilon, Dermalon	
Polypropylene:	Prolene	
Polybutester:	Novafil	
2. Absorbable materials for dermal and fascial closures		
Polyglycolic acid:	Dexon, Dexon Plus	
Polyglactin 910:	Vicryl	
Polydioxanone:	PDS (monofilament absorbable)	
Polyglyconate:	Maxon (monofilament absorbable)	
3. Absorbable materials for mucosal and scrotal closure		
Chromic Gut		
Polyglactin 910:	Vicryl	

Table 7-1 Absorbable Suture Materials

Material	Structure	Tissue Reaction	Tensile Strength	Tissue $\frac{1}{2}$ Life (Days)	Uses and Comments
Gut	Natural	+++++	++	5-7	For mucosal closures, rarely used
Chromic gut	Natural	+++++	++	10-14	For oral mucosa, perineal, and scrotal closures; can be annoying to patients because of stiffness
Polyglycolic acid-PGA (Dexon)	Braided	++	+++	25	For subcutaneous closure; <i>+ ligature vs. sq.</i> coated version easier to use but requires more knots (Dexon-Plus)
Polyglactin 910 (Vicryl)	Braided	++	+++++	28	Comes dyed and undyed; do not use dyed on face; irradiated polyglactin excellent for mucosal closures
Polyglyconate (Maxon)	Monofilament	+	+++++	28-36	For subcutaneous closure; less reactive and stronger than PGA and polyglactin
Polydioxanone (PDS)	Monofilament	+	++++	36-53	For subcutaneous closures that need high degree of security; stiffer and more difficult to handle than PGA or maxon

Table 7-2 Nonabsorbable Suture Materials

Material	Structure	Tissue Reaction	Tensile Strength	Knot Security	Uses and Comments
Silk	Braided	++++	++	++++	Easy to handle but has increased potential for infection
Nylon (Ethilon, Dermalon)	Monofilament	++	+++	++	Commonly used in skin closure but high degree of memory; requires several throws for secure closure
Polypropylene (Prolene)	Monofilament	+	++++	+	High degree of memory, low tissue adhesion; good for subcuticular pull-out technique
Dacron (Mersilene)	Braided	+++	++	++++	Easy to handle, good knot security; like silk but less risk to tissue for inflammation and infection <i>*Pr. 1e figure</i>
Polybutester (Novafil)	Monofilament	+	++++	++++	Excellent handling, strength, and security; expands and contracts with changes in tissue edema

Retrait des sutures

Site	Temps (jours)
Visage	5
Tronc, cuir chevelu	7
Extrémités	7-10
Surfaces d'extension	14

Réaliser une anesthésie locale

Techniques de réparation

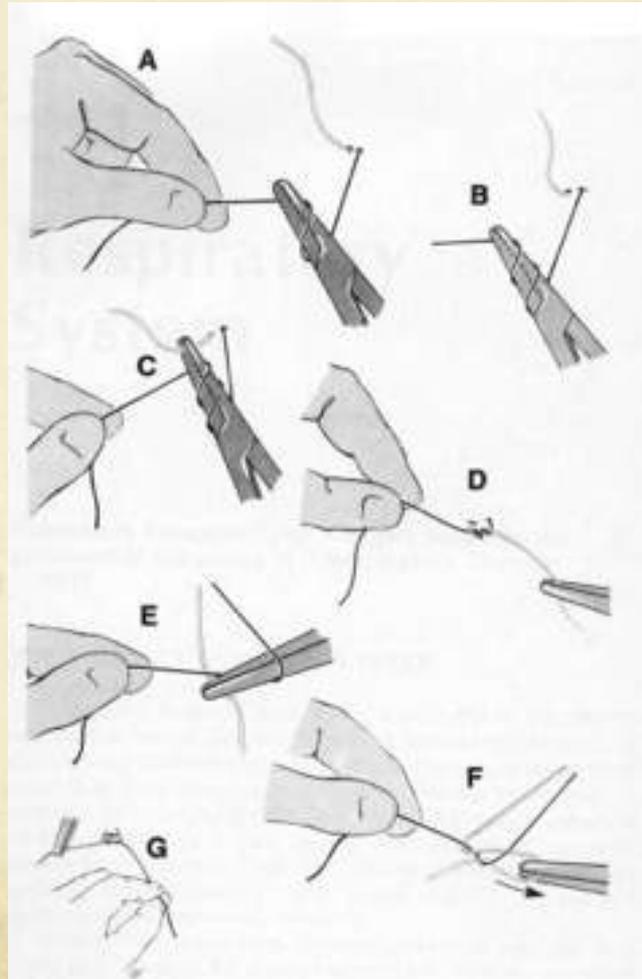
Pinces griffes ou multi-griffes



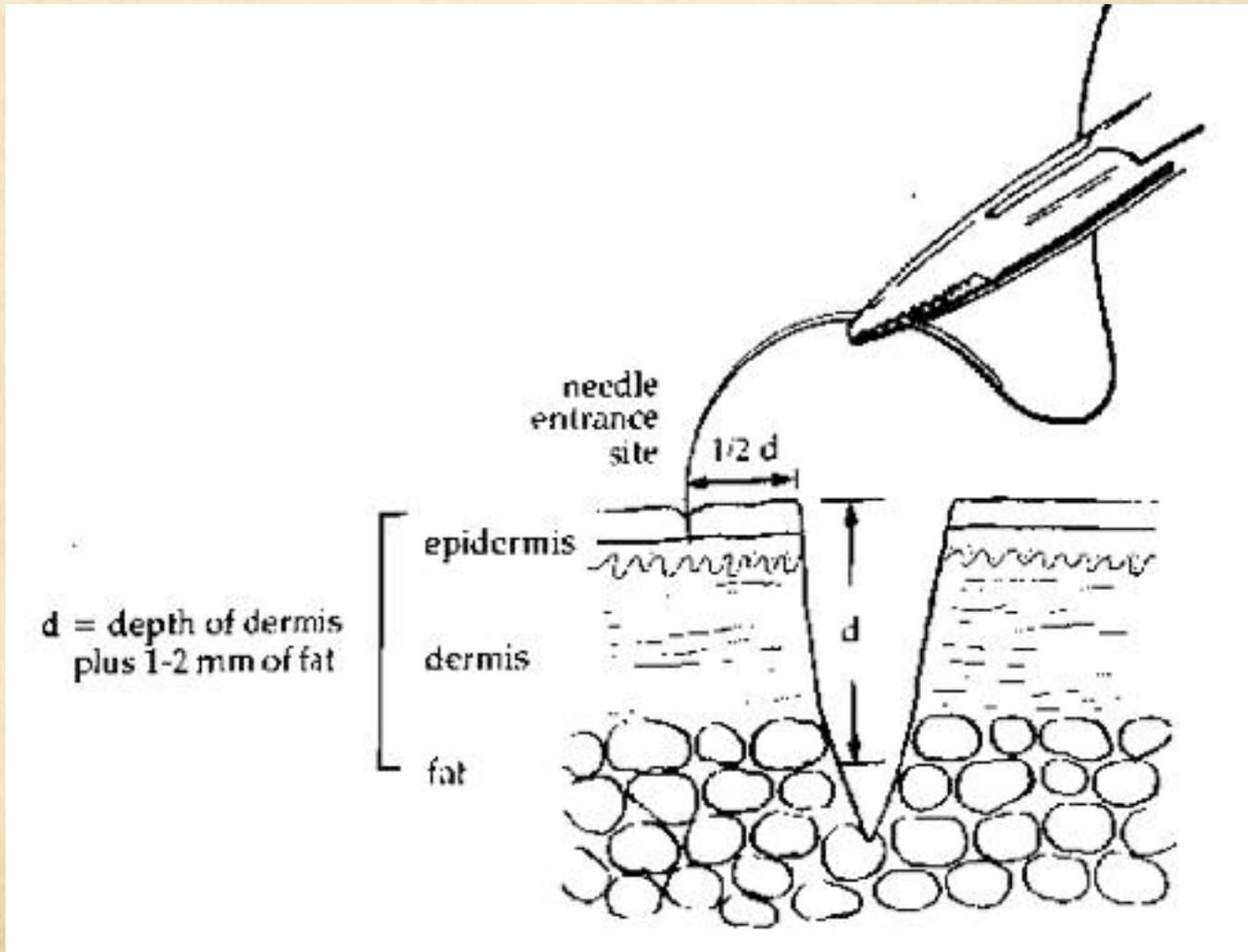
Aiguille 2/3 - 1/3



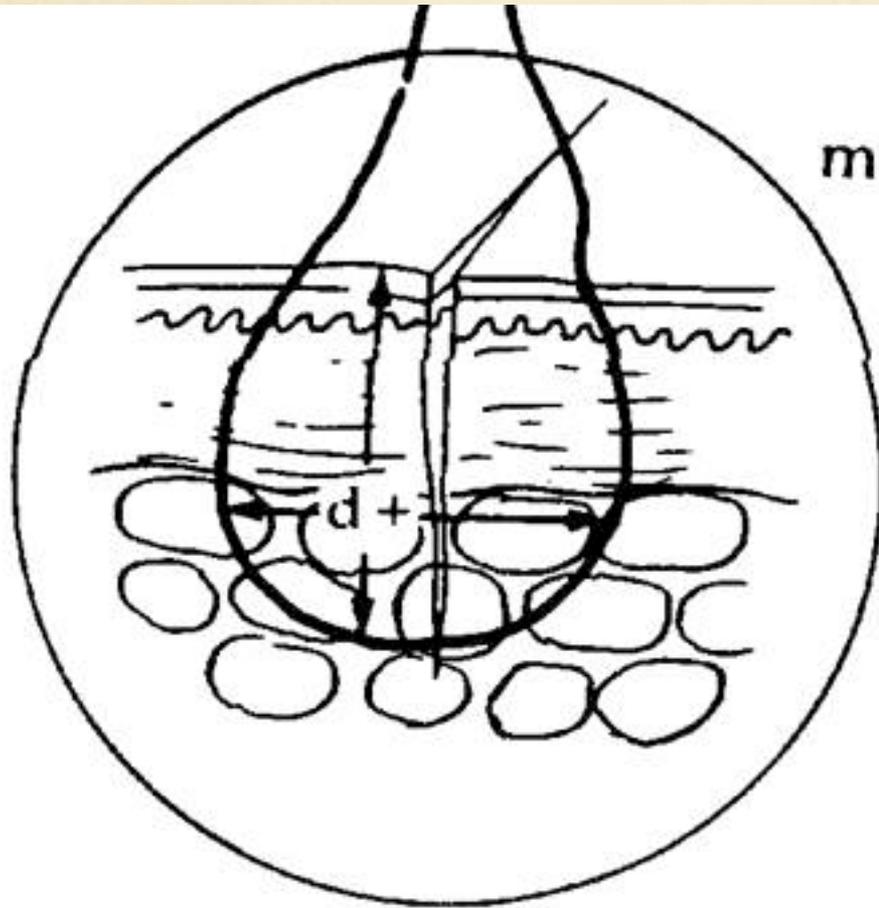
Suture à l'instrument



Point simple

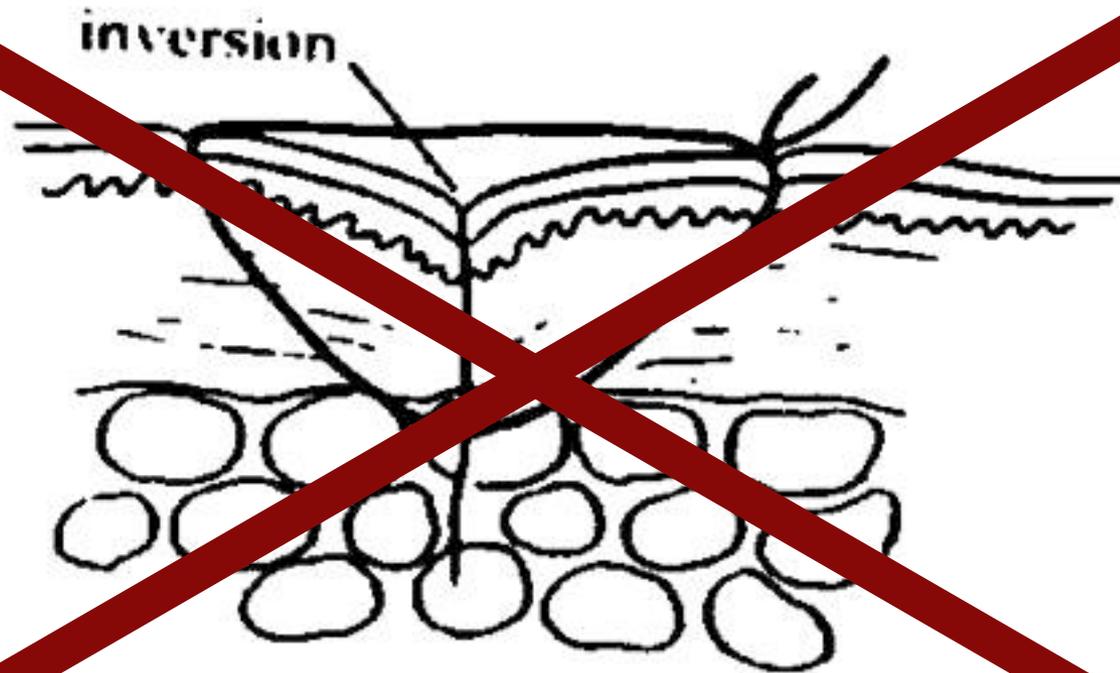


Point simple

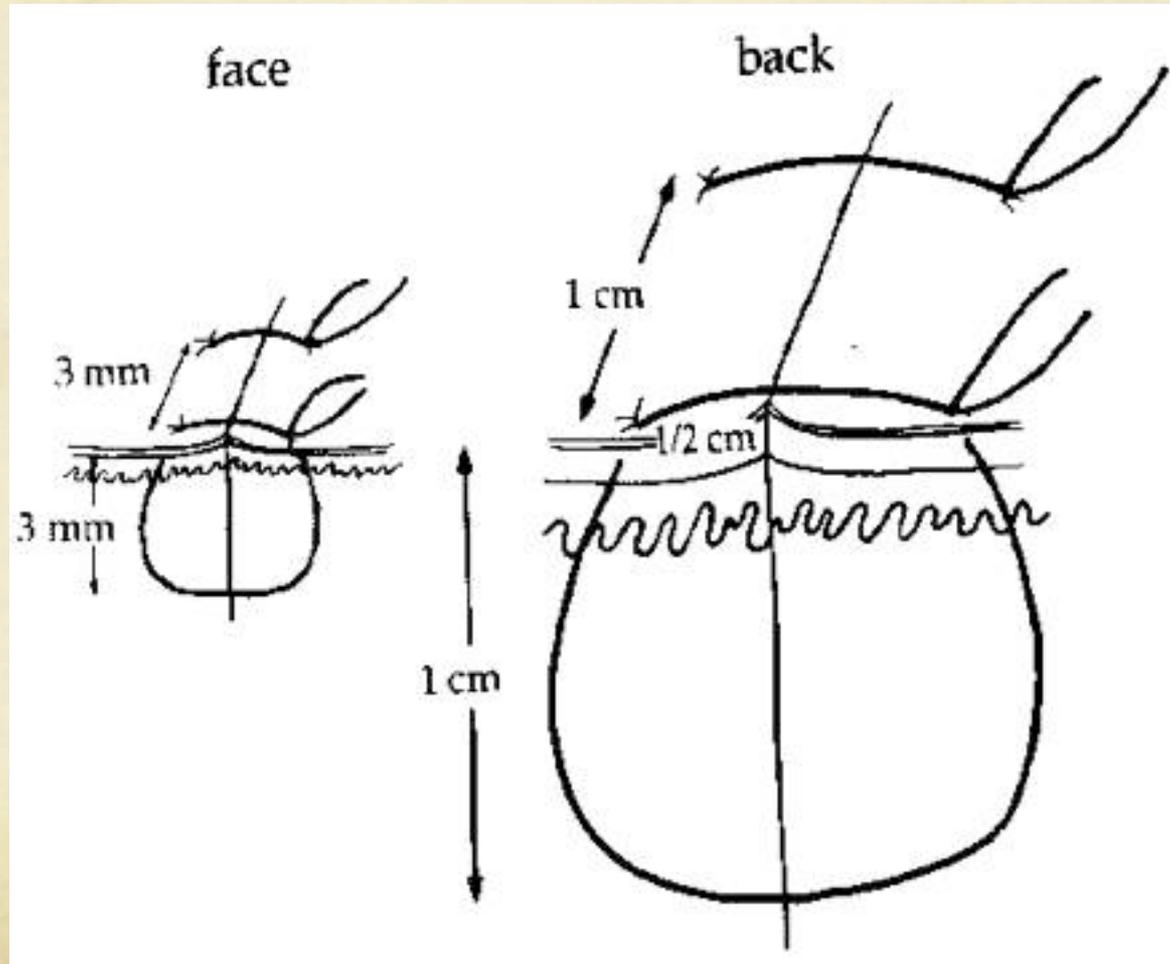


more tissue in depth
than at surface

Point simple



Point simple



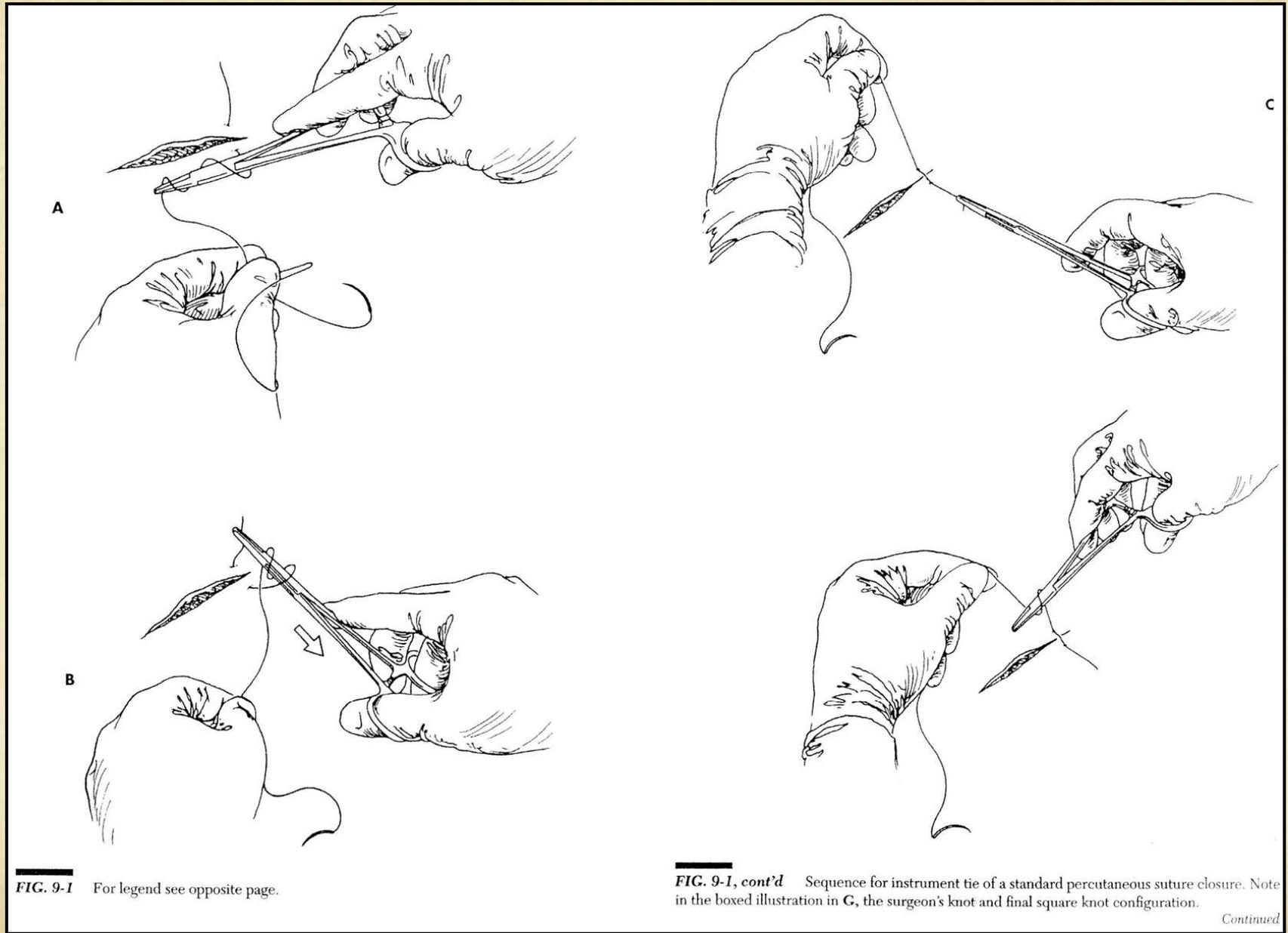


FIG. 9-1 For legend see opposite page.

FIG. 9-1, cont'd Sequence for instrument tie of a standard percutaneous suture closure. Note in the boxed illustration in C, the surgeon's knot and final square knot configuration.

Continued

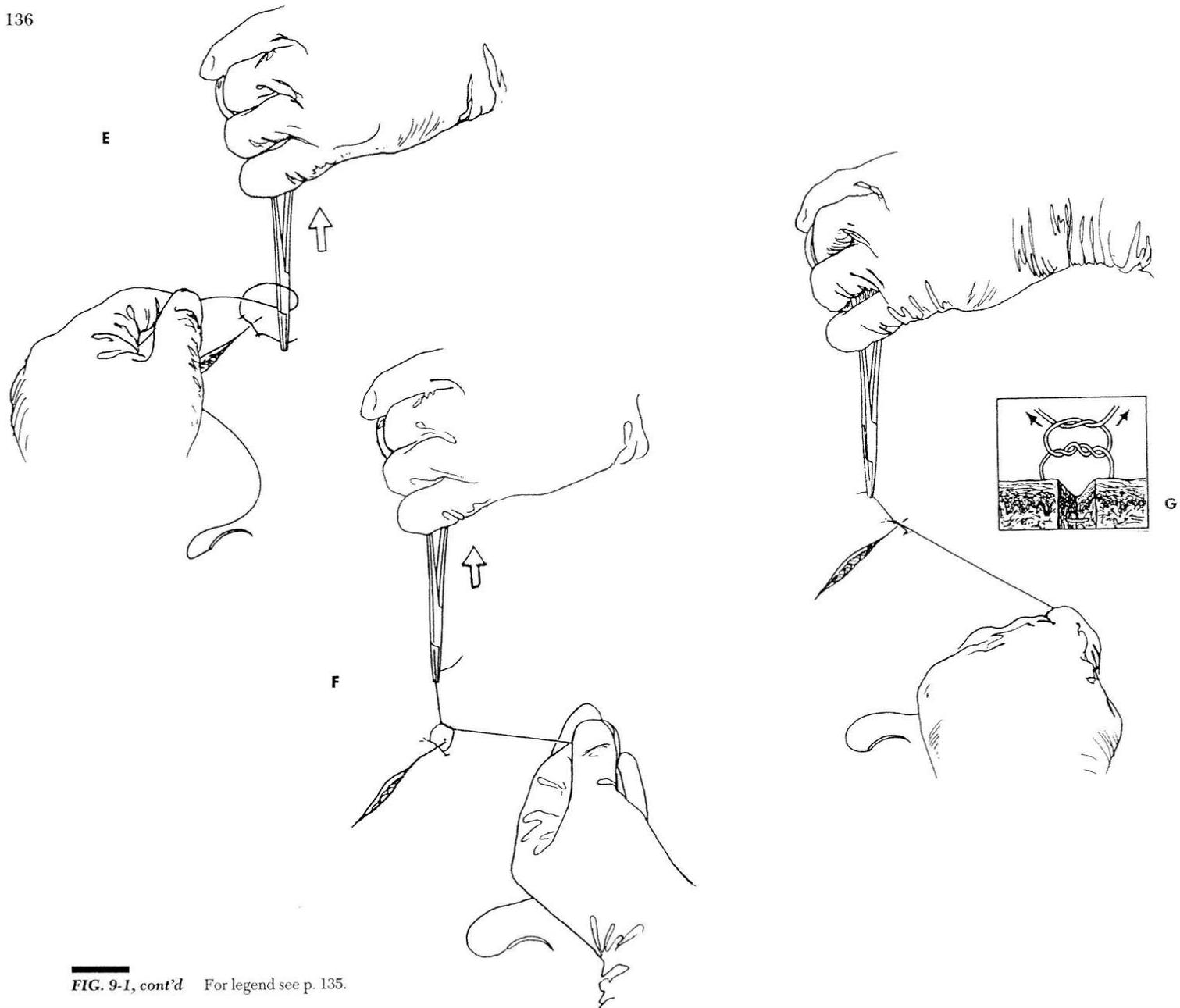


FIG. 9-1, cont'd For legend see p. 135.

Matelassé horizontal

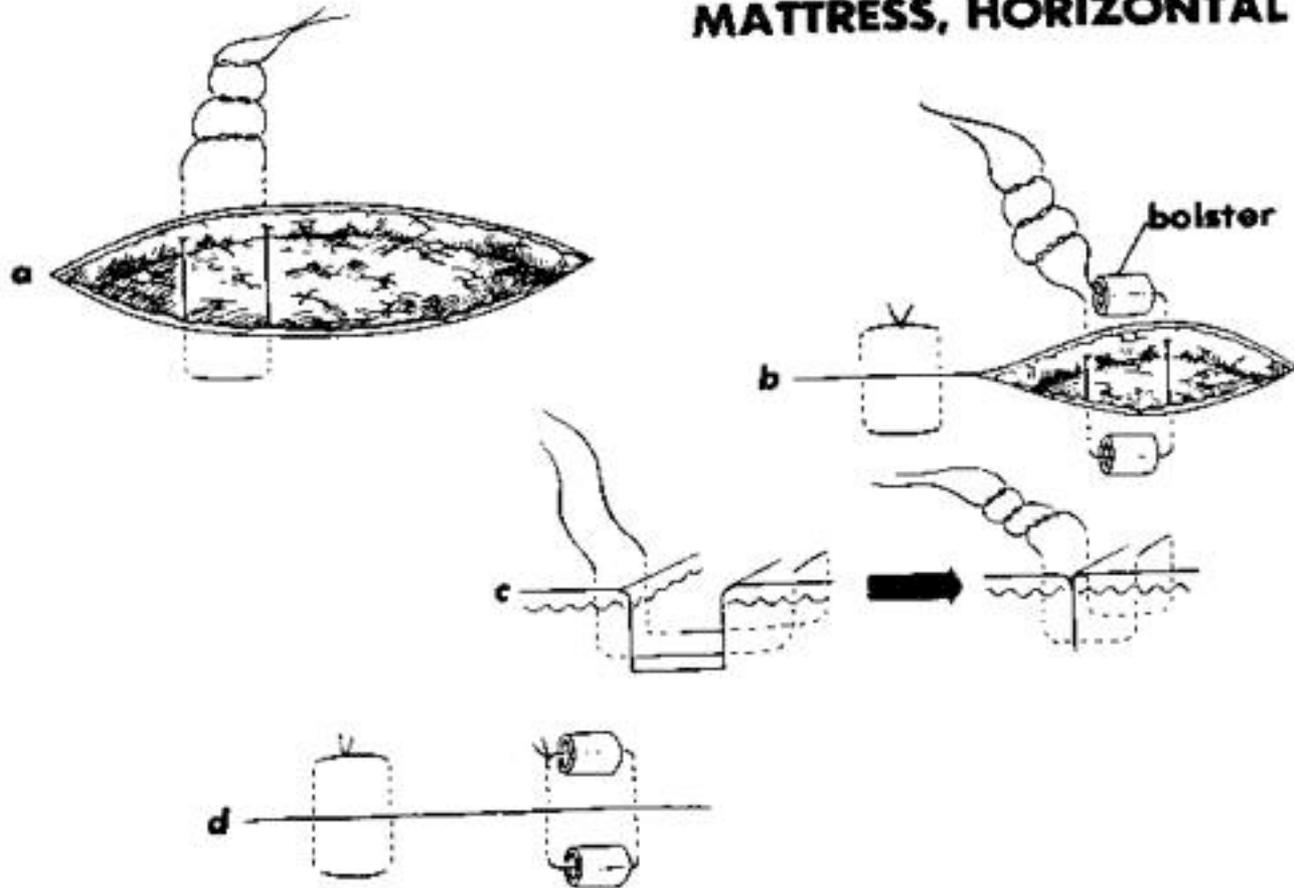


Fig 6-7

Matelassé horizontal

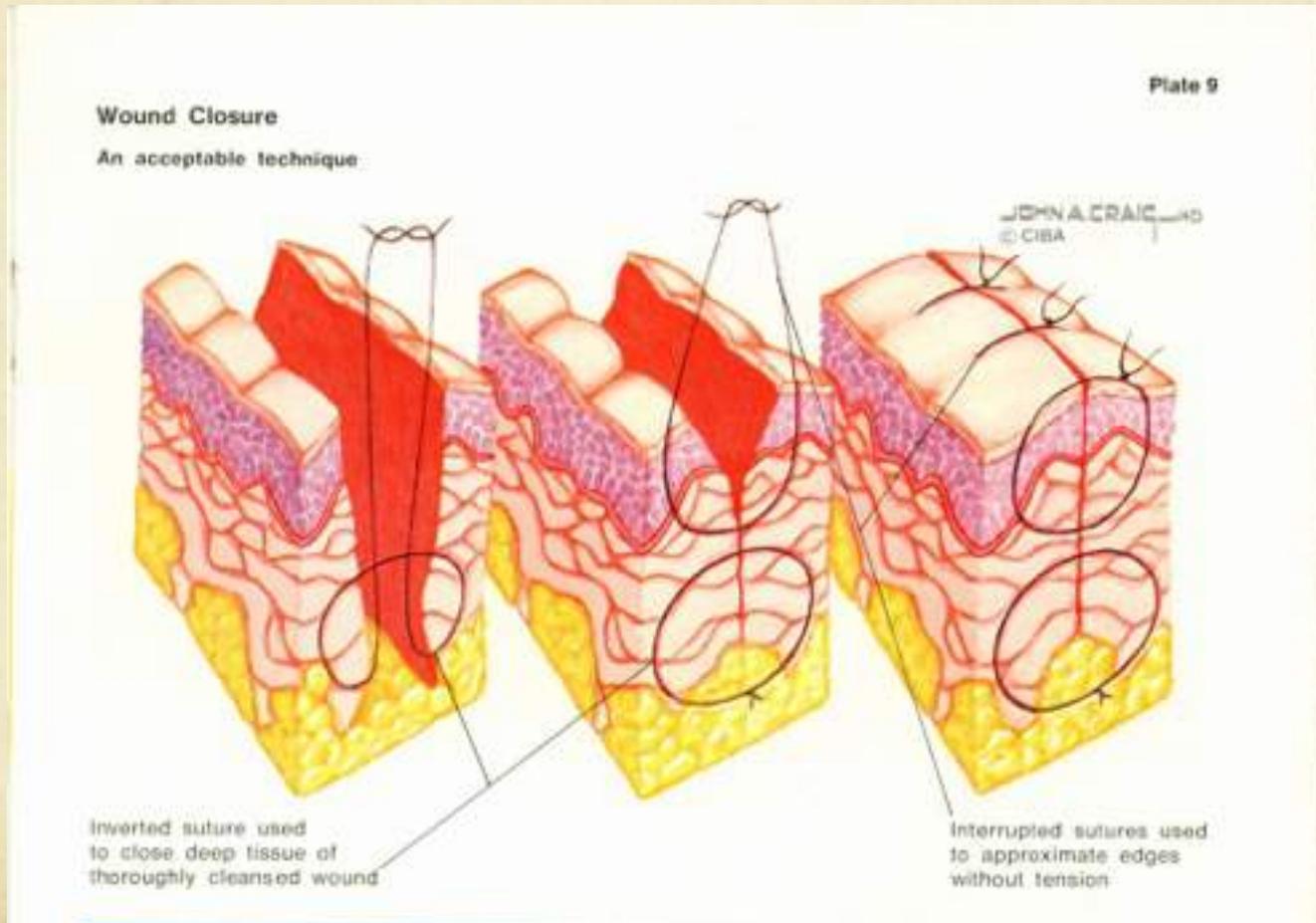
Avantages

- Bonne éversion plaie
- Bonne fermeture de l'espace mort
- Hémostase
- Plaies sous tension

Désavantages

- Risque de nécrose épidermique
- Cicatrices

Plan profond



Plan profond

- Meilleure répartition de la tension
- Absence d'espace mort pouvant créer abcès, hématome
- Facilite l'éversion
- Meilleure cicatrisation

Références

- Trott, Alexander T. - Wounds and Lacerations :
Emergency Care & Closure. - Mosby Inc, 2005.