

Institute of Surgical Research

Surgical techniques – „A5” Practical Module.

- A1. MODUL - Asepsis and the surgeon
- A2. MODUL – Surgical instrumentation
- A3. MODUL – Operations
- A4. MODUL – Bleedings
- A5. MODUL – **sterile bandage change,
suture removal,
open wound management,
bandaging**
- A6. MODUL – Minor surgical procedures



Time of wound closure

Morphology

Puncture/Stab

Incised

Bruised

Crush

Bite

Lacerated

Shot wound

Infection

Clean

Spoiled

Dirty

Wound closure

Primary wound closure

Open wound management

~~Morphology injury of the abdomen~~

~~Any chest~~

~~dura mater~~

~~Infection~~

~~Clean~~

~~Spoiled~~

~~Dirty~~

~~Wound closure~~

~~Wound closure~~

~~Primary wound closure~~

~~Primary wound closure~~

~~Open wound management~~

Morphology

Puncture/Stab

Incised

Bruised

Crush

Bite

Lacerated

Shot wound

Infection

Clean

Spoiled

Dirty

Wound closure

Primary wound closure

Open wound management

Forms of wound closure

Temporary management: first aid	- Aim: cover the wound to prevent infection
Definite primary wound management	- Primary wound closure (within 6 hrs)
Open wound management is followed by later closure	- Primary delayed wound suture (3-8 days) - Early secondary wound closure (> 14 days) - Late secondary wound closure (4 - 6 weeks)

Steps:

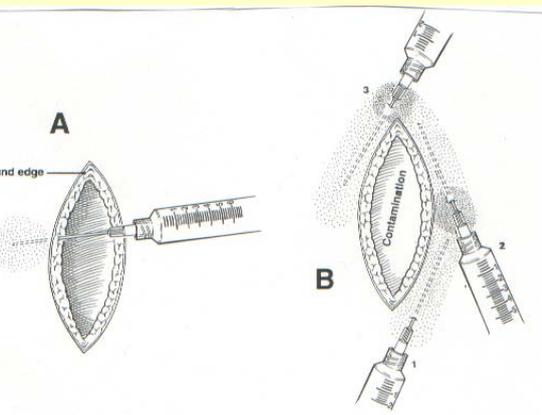
Local anesthesia

Excision

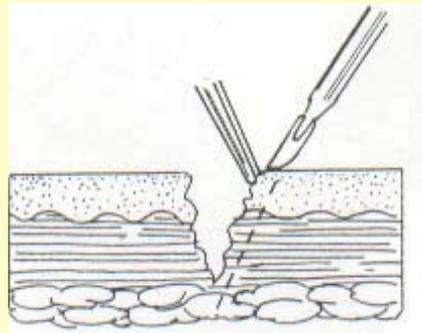
(except: face, hand)

Primary suture

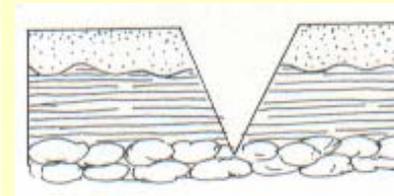
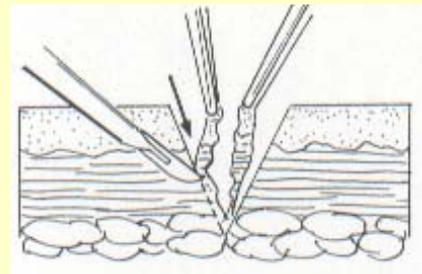
Drain



Local anesthesia



Excision



PRACTICAL

Inflamed wound and abscess management

Aim: localization of a purulent process & facilitation of emptying toward the surface

Tools:

1. Steam bandage

Ointment (Burow ointment, aids demarcation of the necrotic area),

Sterile gauze sheet

Plastic layer (for isolation of heat and steam)

Fixing layer

Result: the pus discharges toward the surface

2. An already demarked inflammatory process: abscess

Should be OPEN in local anesthesia

PRACTICAL: BANDAGING

Layers of bandages

1. Layer in direct contact with the wound:

- simple sheet (e.g. Mull sheet: good fluid absorption)
- impregnated sheet (vaseline, paraffin: ie. “Jelonet”, non-sticking) (with saline which melts when gets into contact with body fluids i.e. Mesalt.)

2. Absorbent layer (to absorb and store blood and excretion)

3. Fixing layer to secure the bandage (adherent tapes)

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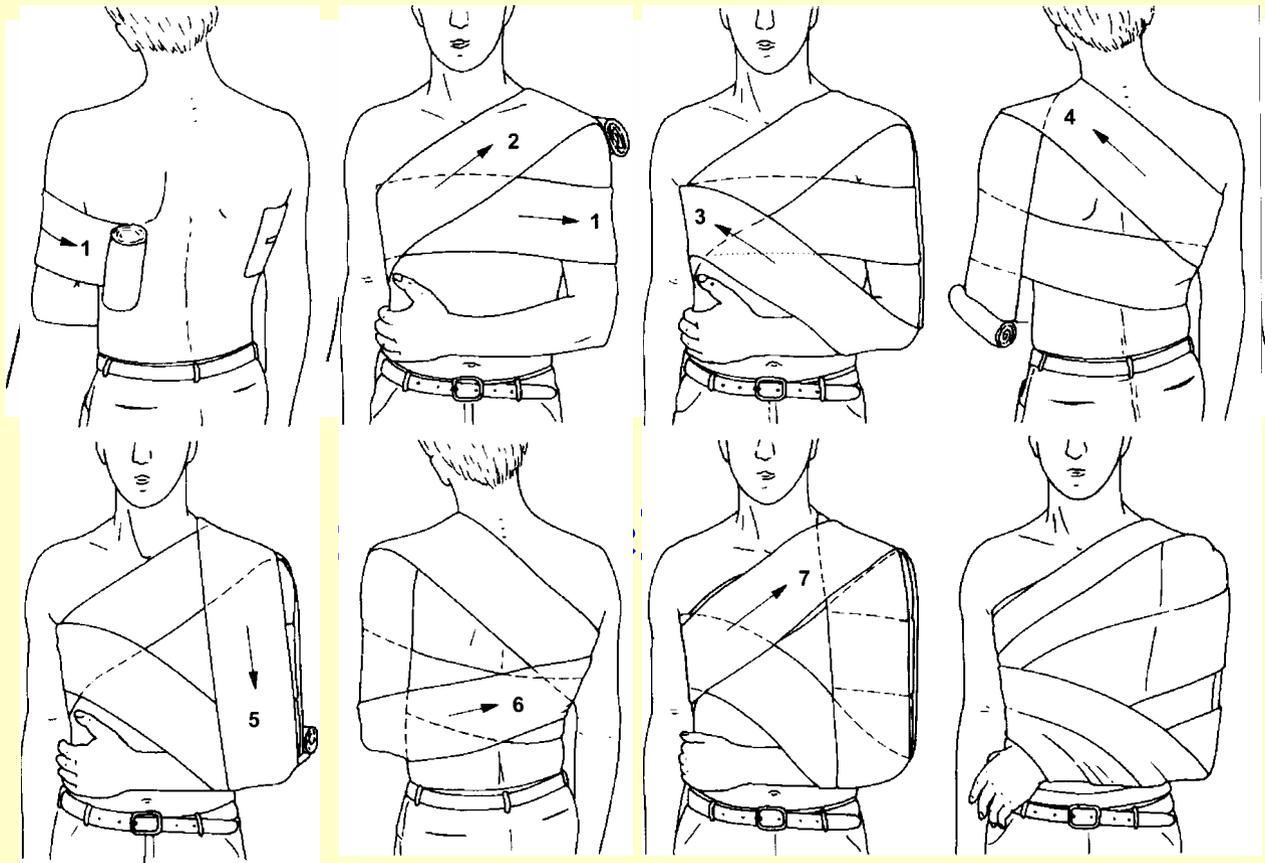
ndage

TYPES OF BANDAGES

Depending on the function:

- **adherent/taped bandages:** (to fix covering bandages, to approximate edges of small wounds)
- **covering bandages:** (to protect the wound and absorb secretion)
- **pressing bandages:** (for temporary handling of capillary and venous bleedings under 40-60 mmHg.)
- **wedging bandages:** (used for temporary handling of capillary arterial and venous bleedings until surgical management. Should be relieved in every 2 hrs)
- **compressing bandages:** (to prevent postoperative bleeding on the limbs, and for the prophylaxis of thrombosis and for the reduction of chronic lymph-edema. *Always placed from distal to proximal.*)
- **fixing/retention bandages:** (to immobilize the injured body part or to fix the reposition).

Special retention bandages:



***Desault* bandage**

SCHEDULE

Time (min)	0-20	20	-55	55-	90
	Wounds Bandaging				
1st group		Suture removal, sterile bandage removal	Open wound management, Bandage change	Ear bandage, Retention bandages	Cover bandage Steam bandage
2nd group		Suture removal, sterile bandage removal	Open wound management, Bandage change	Cover bandage Steam bandage	Ear bandage, Retention bandages
3rd group		Cover bandage Steam bandage	Ear bandage, Retention bandages	Suture removal, sterile bandage removal	Open wound management, Bandage change
4th group		Ear bandage, Retention bandages	Cover bandage Steam bandage	Suture removal, sterile bandage removal	Open wound management, Bandage change