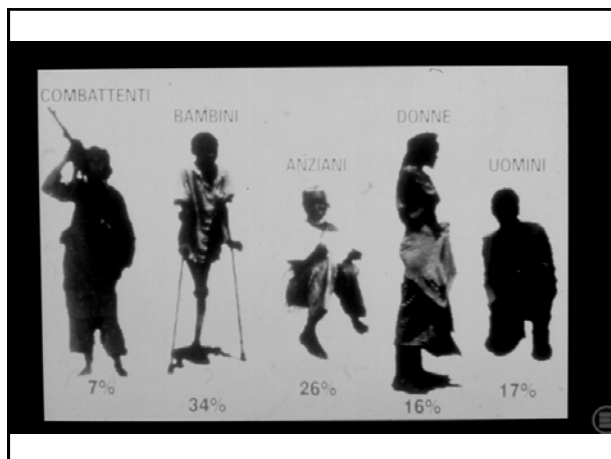


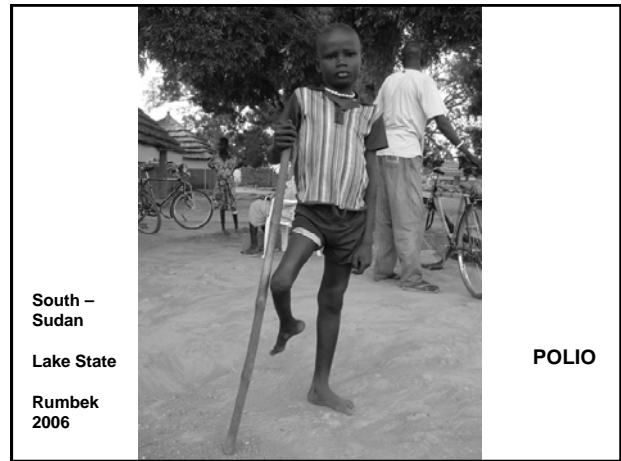
 **WAR SURGERY**

AFGHANISTAN  
IRAQ  
SIERRA LEONE  
DARFUR

2002 - 2006  
"EMERGENCY"

**SILVIO GALVAGNO**





- Organization of an emergency setting**
1. Identify the area and FAP (First Aid Post) network
  2. Building
  3. Local Staff selection and training
  4. Provision of materials
  5. International Staff selection

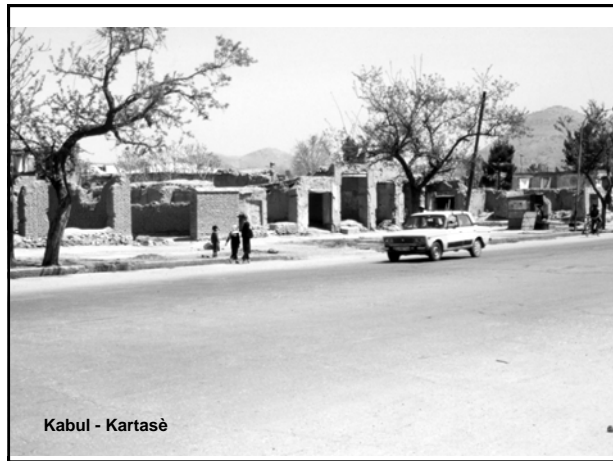




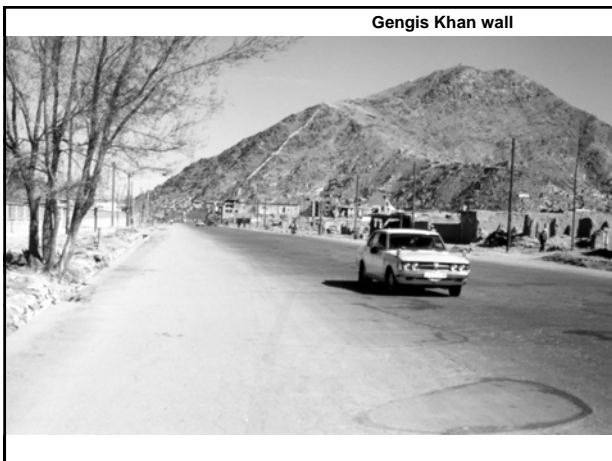
Kabul  
English lesson



Casualty  
Kabul



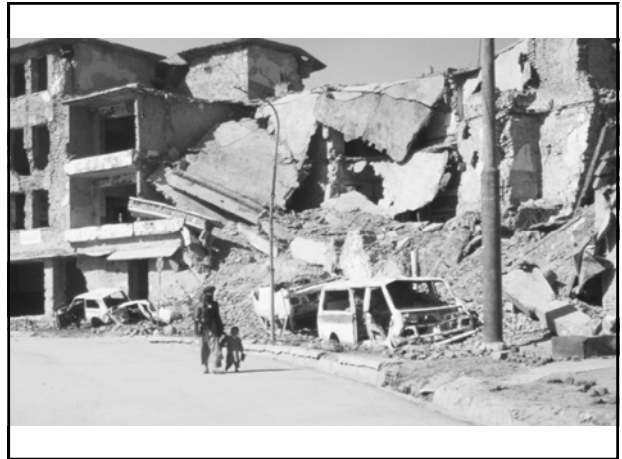
Kabul - Kartasè



Gengis Khan wall

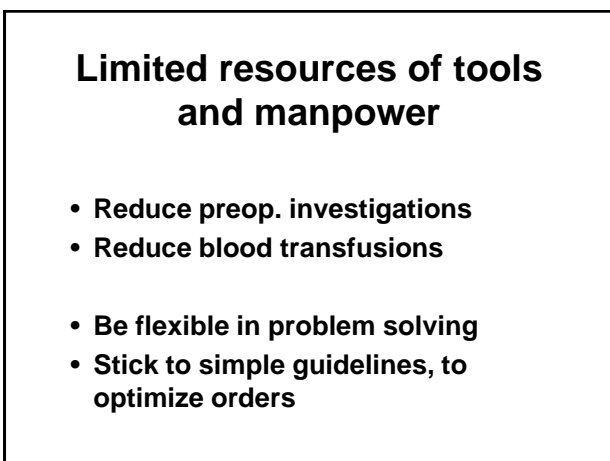
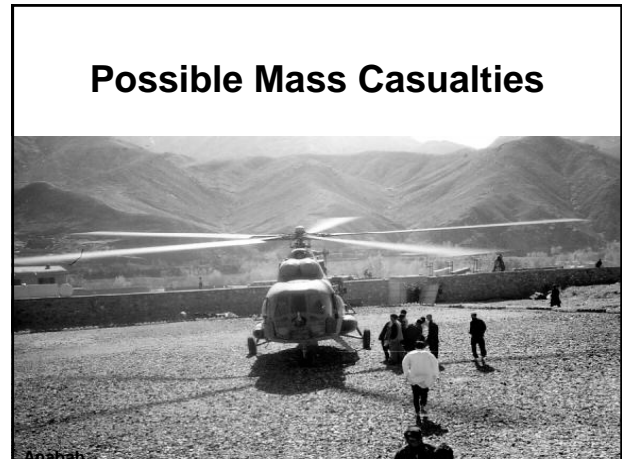


Water – sanitation – power supply – internal displaced people...



Anabah – Panshir Valley





### Correct blood use



### Head to Toe Surgeon



### Optimize orders

- Standard orders in post-op. treatment
- Clear planning for every patient
- Simple guidelines for essential drugs

### Mass Casualties

- Simplified Triage
- Sometimes surgical procedures in stages

### Triage

- D.O.A.
- CAT. I
- CAT.II
- CAT.III



### Stages surgical procedures

- Postpone a non-life saving procedure (vascular repair) in mass casualties
- Damage- control surge



### Peculiar injuries

- Frequent multiple wounds
- High velocity missiles (kalashnikov)
- Unusual weapons ( land-mines & UXO)

### Multiple shell injuries



### High velocity injuries



### Anti-personnel land mines



### UXO

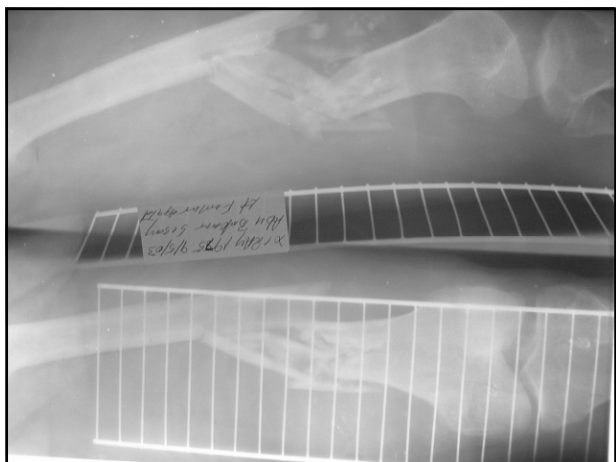




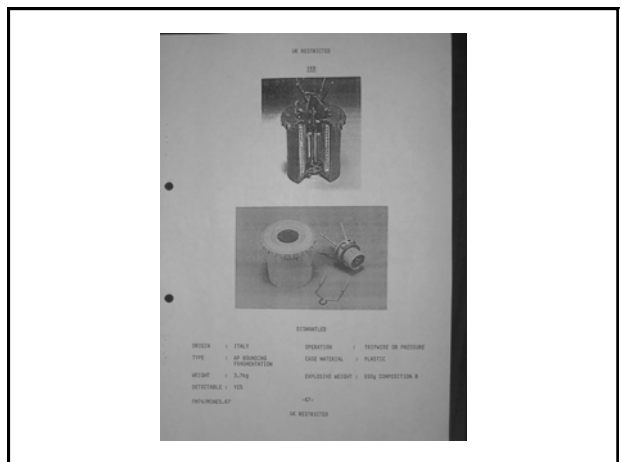
**Treatment of particular lesions**

- Land mines
- Open fractures
- Open Head and Maxillo-Facial Injuries
- Chest Injuries
- Abdominal Injuries
- Vascular Injuries
- Burns
- Re-opening







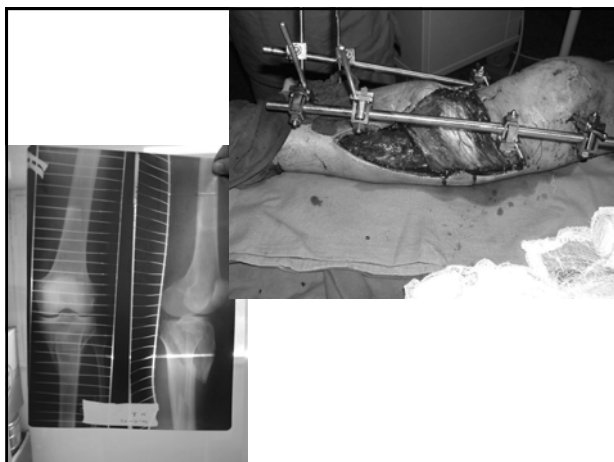




**Open fractures**



**In O.T. five days later**




### Open head wounds

- Always DBR
- Scalp closure problems

Three small photographs showing different stages of an open head wound. The top photo shows a large scalp laceration. The middle photo shows a deep skull injury with exposed brain tissue. The bottom photo shows a closed scalp wound.

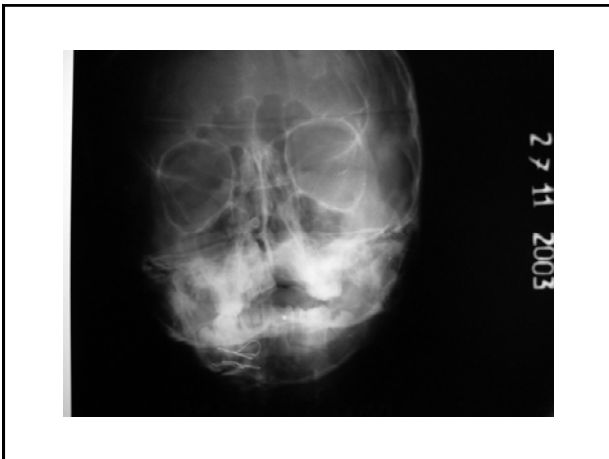
### Maxillo-facial Injuries

- Quick airway control
- Gastrostomy
- DBR
- Dental wiring if possible

An intraoperative photograph of a maxillo-facial injury. The patient's face is open, and surgical instruments are visible, indicating a complex surgical procedure.







**Open chest injuries**

- Wide clinical range: stable/about to die
- 75% need 2 C.T. (chest tube)
- Better one useless C.T. than one missed

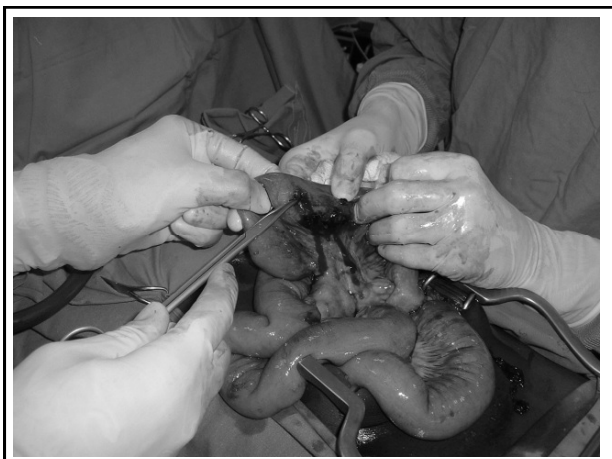
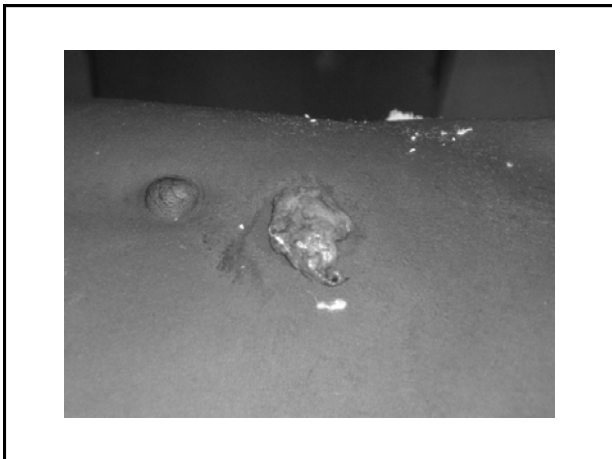
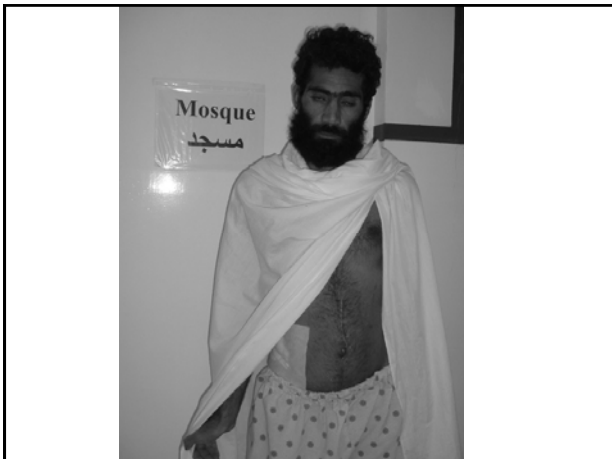
• Rare and clear indications for thoracotomy

...in order to avoid complications

**Abdominal injuries**


- Meticulous explorative laparotomy
- In case of doubt: re-entry

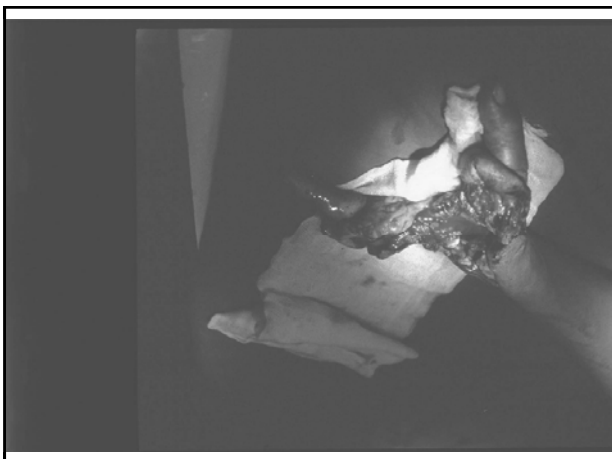
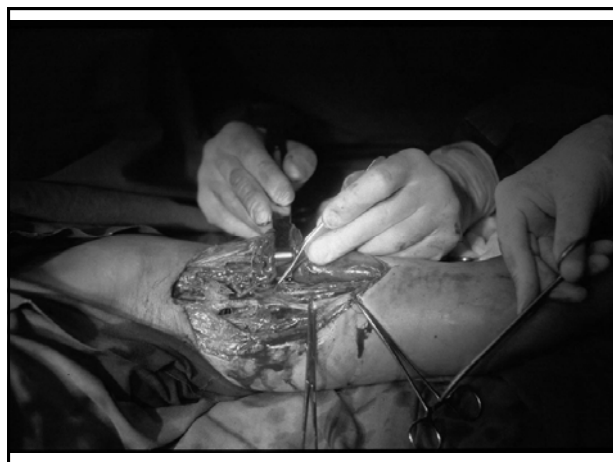




### Vascular injuries


- Clear indications: timing
- Common use of venous graft

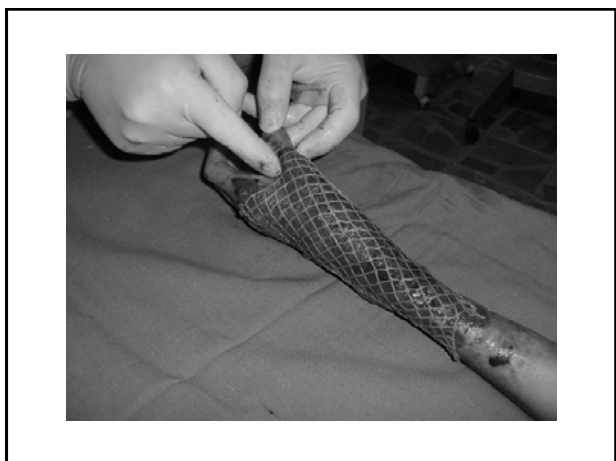
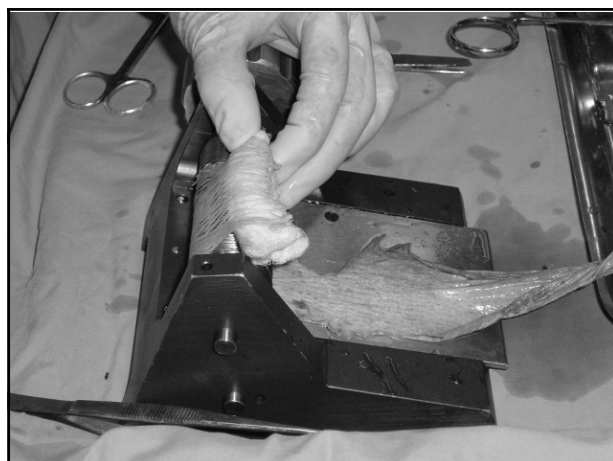
Three small inset images: top right shows a surgical site with a large, dark, tubular structure; bottom left shows a surgical site with a large, dark, tubular structure; right shows a person's torso with a large, dark, tubular structure.



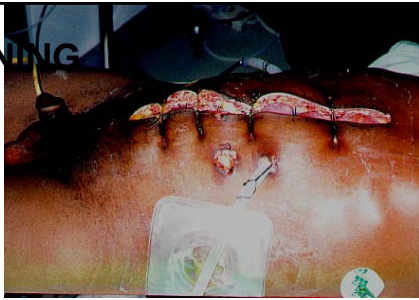
**burns**

- Sometimes part of war injuries
- Several meticulous DBR
- Reduce DRS in ward
- Always HPD
- S.S.G as soon as possible





## RE-OPENING



•Difficult due to:

- ☑Lack of clinical information
- ☑Lack of proper pre-op. investigations

•Poor general conditions (and no parenteral nutrition)

