# Crush syndrom

Z. Rozkydal

## Crush injury

Traffic or building site incidents, explosions, earthquake, train crashes

Extensive damage to body tissues
Severe contusion of organs, mostly muscles
Fractures, muscles injury, severe swelling, internal bleeding
Impaired circulation

#### Signs

- Swelling of soft tissues- skin, subcutaneous tisssue, muscles Impaired circulations of the extremity
- Fractures, open fractures
- Fractures of ribs and sternum
- Contusion of the lungs and bronchi
- Contusion of the heart
- Rupture of liver and spleen
- High amount of myoglobin into circulation
- Myoglobinuria and a risk of acute renal failure

#### First aid

Remove the casualty from the site of injury Stop bleeding Apply sterile dressing Immobilisation of the extremity Transport to ITU

#### Management

Haemodialysis
Osmotic diuresis
Management of fractures
etc

## **Blast syndrom**

Damage of the lungs by pressure wave in explosion

Alveolocapillar membrane of the lungs is damaged

Damage to other organs containing the air

bowels, internal ear

Connected often with fractures of ribs

## Signs

Dyspnoe, haemoptysis, pneumothorax, haemothorax, Chest pain, abdominal pain, abdominal bleeding Diminished hearing, high productin of tears

#### First aid

Elastic bandage of the chest Positioning of the casualty- on the side with flexed knees