

Open fractures

- the rule of treatment within 6 hours after the injury applies.

breaking the skin **externally** by direct tissue injury;

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- **G 0** - fracture resulting from indirect violence without soft tissue damage;
 - for high energy traumas;

Degrees of injury:

- **O III** - heavily contaminated wound, extensive tissue contusion, nerve and vascular lesions;
- **O IV** - total or subtotal amputation;
 - less serious, most often the diaphyses on the lower leg, the surrounding tissues are usually not more severely damaged;

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in the first place, it determines the prognosis of the injury with respect to soft tissue injuries;

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the letter G indicates closed fractures (geschlossene) and O open (offene).

- **G III** - complicated skin and soft tissue contusion, compartment syndrome, decollement, mostly comminutive;
- **O I** - small wound with contusion of the skin, punctured by a bone fragment;
- **O II** - wound (approx. 2 cm) with limited contusion of skin and tissues, small contamination;

There are two types of skin opening:

Classification

- **G I** - superficial contusion of the skin cover with surface abrasion;

piercing the skin **inside** with a fragment;

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The classification according to **Tscherne** is currently accepted:

- **G II** - deep contaminated abrasion, limited skin and muscle contusion, caused by direct external force, greatly dislocated;
 - we sterily cover such an injury at the site, we record the extent of the damage, we do not remove the cover at the

ambulance (high risk of nosocomial infection), we wait until the place of definitive treatment (in the hall); '*Open fractures* are fractures with a broken skin cover, which occur mainly in bones covered only by a thin cover of soft tissues. Machine Translated by Google

In the hospital

- if we do not detect allergy, the method of choice is PNC-G 5 million units, 2 g oxacillin;

prevent further tissue damage;

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- we clean the wound - mechanically, then - hydrogen peroxide, chloramine, physiological solution;

we transport to the hall, then we proceed as for another fracture;

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we check vaccination against tetanus, apply tetanus anatoxin (TAT 0.5mg), when the maintenance procedure must be performed within 6 hours after the injury;

- removal of necrotic tissue (debridement);
- whether to save or amputate tells us roughly MESS score (certain points for type of injury, age, shock,



Closed fracture type G II

extent...).

- subtotal amputation – accompanied by interruption of anatomical structures, mainly large vessels, complete ischemia of the periphery;

disinfection, sterile covering, immobilization;

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Therapy

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already in the clinic we also apply ATB to aerobes and anaerobes;

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- stabilization of the general condition, anti-shock treatment;
- cleaning the wound in the vestibule - we remove the cover for the first time;
 - alternative for allergy – clindamycin with gentamycin;

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we gently reposition the limb by pulling on the periphery; we do not remove the cover, we obtain information about the wound from the PP provider; then x-ray, or sonography, angio...;

- we always drain the fracture site;

heavy pollution and globulin (TEGA);

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in case of bleeding, we will put a pressure bandage, record the time data.

- total amputation – tissue damage is such that not even a quarter of the circumference of the limb is preserved.

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First aid

Operation

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Related Articles

Crush syndrome

Source

BENEŠ, George. *Questions from Orthopedics and Traumatology* [online]. [cit. 2011-01-28]. <<http://jirben2.chytrak.cz/>>.

- collection of 3 microbiological samples;

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Links

- we do not sew the fascia, there is a risk of compartment syndrome.
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Fracture healing disorders

- tissue vitality is assessed according to the 4Cs (contractility – muscle contraction, color – color, consistency – tissue quality, capillary bleeding);

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