

# DESCRIPTION AND CLASSIFICATION OF THE INJURY Soft-

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There are several classification systems for soft-tissue injuries: the Tscherne classification for closed injuries, the Gustilo and Anderson for open injuries ( Table 32.2 ) and the Ganga classification of severe open injuries. The first step in soft-tissue injury characterisation is to decide if this is an open or closed fracture – an open frac - here the fracture haematoma com - ture being any fracture w municates with a breach in the epithelial lining, not just skin. For example, an open pelvic fracture may communicate with the vagina or rectum and a mandibular fracture through the mucosa of the mouth (see Open fractures ). Consider all the soft tissues cr ossing the zone of injury , as it is possible to get a closed rupture or avulsion of tendons without a break in the skin. Consider the possibility of a neuro - vascular injury (see Neurological injury ). Severe soft-tissue injur y in the presence or absence of a fracture may still lead to compartment syndrome (see Compartment syndrome ).

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classi /f\_i cation. Type I A low-energy open fracture with a wound less than 1 /uni00A0 cm long and clean II An open fracture with a laceration more than 1 /uni00A0 cm long without extensive soft-tissue damage, /f\_I aps or avulsion III Characterised by high-energy injury irrespective of the size of the wound. Extensive damage to soft tissues, including muscles, skin and neurovascular structures, and a high degree of contamination. Multifragmentary and unstable fractures Subgroups of type III A Adequate soft-tissue cover of a fractured bone after stabilisation B Inadequate soft-tissue cover of a fractured bone after stabilisation (i.e. /f\_I ap coverage required) C Open fracture associated with an arterial injury requiring repair Source: Gustilo RB, Mendoza RM, Williams DN. Problems in the management of type III (severe) open fractures: a new classi /f\_i cation of type III open fractures. J Trauma 1984; : 742-6.

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classification. Type I A low-energy open fracture with a wound less than 1 cm long and clean II An open fracture with a laceration more than 1 cm long without extensive soft-tissue damage, lacerations or avulsion III Characterised by high-energy injury irrespective of the size of the wound. Extensive damage to soft tissues, including muscles, skin and neurovascular structures, and a high degree of contamination. Multifragmentary and unstable fractures Subgroups of type III A Adequate soft-tissue cover of a fractured bone after stabilisation B Inadequate soft-tissue cover of a fractured bone after stabilisation (i.e. flap coverage required) C Open fracture associated with an arterial injury requiring repair Source: Gustilo RB, Mendoza RM, Williams DN. Problems in the management of type III (severe) open fractures: a new classification of type III open fractures. J Trauma 1984; : 742-6.

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Revision #1

Created 2025-12-31 15:13:27 UTC by Omar Ayman

Updated 2025-12-31 15:13:27 UTC by Omar Ayman