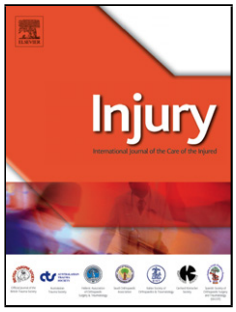

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PII: S0020-1383(18)30204-3
DOI: https://doi.org/10.1016/j.injury.2018.04.016
Reference: JINJ 7658

To appear in: *Injury, Int. J. Care Injured*

Received date: 25-1-2018
Accepted date: 16-4-2018

Please cite this article as: Hak David J.The biology of fracture healing in osteoporosis and in the presence of anti-osteoporotic drugs.*Injury* https://doi.org/10.1016/j.injury.2018.04.016

The biology of fracture healing in osteoporosis and in the presence of anti-osteoporotic drugs

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Abstract

Compromised bone strength in osteoporosis predisposes patients to an increased fracture risk. The management of these fractures is complicated due to the poor bone quality, which may lead to inadequate fixation strength and stability. While a number of studies using osteoporotic animal models have shown a detrimental impact on fracture healing, clinical evidence regarding whether fracture healing is impaired in the presence of osteoporosis is complicated by numerous associated conditions including advancing age.

The mechanism of some anti-osteoporotic medications creates concern about a potential detrimental impact on fracture healing, while others appear to enhance fracture healing. The current evidence indicates that the beneficial effects of anti-osteoporosis treatment exceeds any concerns about possible adverse consequences on fracture healing in most circumstances.