

Anti-inflammatory medication

Anti-inflammatory medication (NSAIDs) can be an effective option for short term pain relief in cases of muscle and joint injury, however research suggests that they should be used with caution.

Inflammation is commonly seen as “bad” and something that needs to be eliminated as quickly as possible. However, the reality is that acute inflammation is a vital first step in the healing process. When any tissue of the body is injured healing occurs in three phases:

1. The Inflammatory phase.
2. The Repair phase.
3. The Remodelling phase.

Each phase of healing is necessary for the subsequent phase. In fact, it has been said that “Inflammation can occur without healing, but healing cannot occur without inflammation”.

Research shows that minimising the inflammatory stage of healing with the use of anti-inflammatory medication likely has some negative long-term consequences:

- “the use of these medications [NSAIDs] inhibits ligament healing, and thus, leads to impaired mechanical strength” [1]
- “NSAIDS appear to have a positive effect on the evolution of an acute ligament injury... **However**, in the long term, this rapid return is likely to be at the detriment of good healing [2]”
- “We do not recommend their [NSAIDs] use for muscle injuries, bone fractures (also stress fractures) or chronic tendinopathy.” [2]

In summary, anti-inflammatory medication will likely decrease pain in the short-term but they may do so at a cost to complete tissue healing. If you do choose to take NSAIDs, you should take the minimum effective dose for the shortest possible time.

References

1. Hauser, R. A., Dolan, E. E., Phillips, H. J., Newlin, A. C., Moore, R. E., & Woldin, B. A. (2013). Ligament Injury and Healing: A Review of Current Clinical Diagnostics and Therapeutics. *Open Rehabilitation Journal*, 6, 1-20
2. Ziltener, J. L., Leal, S., & Fournier, P. E. (2010). Non-steroidal anti-inflammatory drugs for athletes: an update. *Annals of Physical and Rehabilitation Medicine*, 53(4), 278-288.

