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# PROLO REVIEW

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## Take two aspirin and.....

Traditional medical dogma dictates that immediately following an injury we should take steps to minimize inflammation. Inflammation that follows an acute injury, however, is not necessarily bad and appears to be a critical initial phase of the healing response. The inflammatory process clears dead cells and damaged extracellular matrix, protects against overuse, promotes capillary growth, and recruits new cellular elements that restore the tissue.

Non Steroidal Antilflammatory Drugs (NSAID's) including Cox-2 inhibitors (celebrex, Vioxx, Bextra) interfere with bone healing and increase the risk of nonunion, as found in retrospective, case-control studies of femoral fractures.

The evidence on the adverse affect of NSAID's after acute soft tissue injuries to muscle, tendon, or ligament is less clear. Although terms like "tendonitis" are commonly used, most tissue studies of chronic tendonitis have not shown distinct features of either acute or chronic inflammation. In fact, it appears that the weakening of ligaments and tendon insertions occurs because of a failure of the normal inflammatory reparative response. Blocking pain by inhibiting inflammation therefore has the potential to inhibit injury repair in muscle strains as well.

So what about taking two aspirins and calling me in the morning? It's a relatively minor sin in the great scheme of things, but something that should be avoided when going to the trouble and expense of Prolotherapy ligament reconstruction. It is for this reason that use of NSAID's are prohibited during the regrowth phase of Prolotherapy.

Acetaminophen, or if necessary stronger pain medicines are prescribed for symptomatic pain relief.

Here are some of the conditions for which Prolotherapy might be of benefit.

- Osteoarthritis
- Headache
- Persistent whip-lash pain
- Neck pain
- Rotator-cuff tear
- Tendonitis or tennis elbow
- Carpal tunnel syndrome
- Low back pain
- Torn knee ligaments
- Frequent ankle sprain

In a musculotendinous injury the inflammatory stage occurs during the first week after injury.

The fibroblastic collagen rebuilding phase of repair begins between 7 and 21 days post injury.

### NUTRITIONAL DEFICIENCY AND PROLOTHERAPY

THE BODY HAS TREMENDOUS REGENERATIVE CAPABILITIES BUT ONE MUST NEVER FORGET THE FACT THAT MANY DIFFERENT FACTORS AFFECT CONNECTIVE TISSUE HEALING. COMMONLY OVERLOOKED FACTORS IN HEALING ARE NUTRITION AND MALALIGNMENT.