Elbow Pain

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Tennis Elbow – The Case Against Cortisone Injection

For over ten years, it has been acknowledged that tendon pain and disease is a non-inflammatory condition (4,5). 'Tendinopathies', including tennis elbow, represent an overuse condition with an absence of inflammatory cells. The condition is degenerative rather than inflammatory. Yet anti-inflammatory treatments, including corticosteroid injections, continue to be prescribed. The following is a brief discussion of the arguments against this practice.

Through poorly understood mechanisms (5), corticosteroids are an extremely effective pain killer. Their ability to inhibit pain in the short-term is one of the reasons for their perceived effectiveness in treating tendon disease. However for chronic tennis elbow, studies have shown mixed results for pain relief (4). At best, pain will improve for 6-12 weeks (2,3,6). Thereafter, symptoms have been found to be worse than for those managed with a "wait and see" approach (1,2,3,6,7,9). Injected patients were significantly worse at 12 months (3).

While cortisone injection for tennis elbow has no clinical benefit, there is good evidence that it delays recovery and is probably harmful to the tendon (4,6,9). Injections into the Achilles tendon were abandoned years ago, after it became evident it was associated with a high incidence of rupture (8). This is not surprising, considering that "corticosteroid injection…leads to cell death and tendon atrophy" (5). Corticosteroids also inhibit collagen synthesis, and decrease tendon load to failure (5). These are the opposite effects to what is required for tendon healing.

Adverse effects on the tendon aren't confined to corticosteroids. NSAID's are also of no clinical benefit (4,6,7), and probably inhibitory to tendon repair (4,6). While there are other injectable and non-injectable pharmalological agents available (sclerosing therapy, PRP, nitrate patches, botox), the evidence for their use is limited (6). Expert consensus, both from quality research and clinical experience, is that the mainstay of treatment should be a tailored exercise programme (1,2,4,5,6). This is the only treatment with definite evidence of benefit through clinical trials. The patient also needs to understand that tendon repair is usually a slow process, with recovery occurring over several months or longer.

References:

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