



Title	Trigger Point Injections for Chronic Nonmalignant Musculoskeletal Pain
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Aim

To assess the efficacy and safety of using trigger point injection (TPI) to treat patients with chronic nonmalignant musculoskeletal pain and to determine the current status of the procedure, its feasibility in regional communities, and the clinical accreditation and training required to perform it.

Conclusions and results

Ten randomized controlled trials (RCTs) met the inclusion criteria. However, deficiencies in reporting, small sample sizes, and interstudy heterogeneity in patient population, treatment regimen, injection site, and experimental protocol precluded a definitive synthesis of the data. TPI is safe when used by clinicians with appropriate expertise. However, the evidence was inconclusive regarding its effectiveness as sole treatment for patients with chronic head, neck, and shoulder pain and whiplash syndrome. Combined use of dry needling and TPI with procaine offers no obvious clinical benefit in treating chronic craniofacial pain. The effectiveness of TPI in treating cervicogenic headache is unknown. In contrast, TPI with lidocaine may be a useful adjunct to intra-articular injection in treating joint pain caused by osteoarthritis, compared to intra-articular injection alone. There was no proof that TPI is more effective than less invasive treatments, eg, physical therapy and ultrasound, in relieving pain. Some suggest that the only advantage of injecting anesthetic into trigger points is to reduce the pain of the needling process.

Recommendations

The efficacy of TPI is uncertain since no evidence clearly shows either benefit or ineffectiveness. Generally, TPI was analyzed as a stand-alone treatment, so its effectiveness might be underestimated by analyzing it in isolation rather than in the adjunct capacity in which it is routinely used. TPI may enable exercise therapy earlier than less invasive methods do, eg, ultrasound. However, this benefit may be offset by the greater skill required to administer TPI, particularly in areas where such expertise

may be scarce. Physicians should understand the importance of not relying on TPI as a sole treatment for chronic nonmalignant musculoskeletal pain. Professional bodies should consider providing a training and accreditation program for practitioners wishing to use TPI in Canada. It may be prudent to tie reimbursement to the successful completion of such training to curb potential overuse and misuse of TPI.

Methods

Data were collected on patients who underwent TPI and had nonmalignant chronic pain of musculoskeletal origin that had persisted for at least 3 months. All original, published systematic reviews or RCTs were identified by searching PubMed, EMBASE, CINAHL, Cochrane Library, Science Citation Index, AMED, BIOSIS, and the websites of health technology assessment agencies, research registers, and guidelines sites from root to September 2004. No language restriction was applied.

Further research/reviews required

Since equipoise exists among many of the potential treatments for chronic nonmalignant musculoskeletal pain, further research should focus on good quality RCTs rather than nonrandomized studies. Given the purported popularity of TPI, this research is essential to establish more realistic expectations of what the treatment can achieve in clinical practice.