



US DEPARTMENT OF DEFENSE
BLAST INJURY RESEARCH PROGRAM
COORDINATING OFFICE

Pain Management and Rehabilitation after Amputation Epidural Steroid Injections, Conservative Treatment, or Combination Treatment for Cervical Radicular Pain: A Multicenter, Randomized, Comparative-Effectiveness Study

Researchers at CRSR at USUHS conducted a comparative-effectiveness study to compare different types of non-surgical therapy for cervical radicular pain, which was published in *Anesthesiology*. A sample of 169 individuals with cervical radicular pain less than 4 years in duration received either nortriptyline and/or gabapentin plus physical therapies, up to three cervical ESIs, or combination treatment over 6 months. The primary outcome measure was average arm pain on a scale of 0–10 assessed one month after cessation of treatment. Mean pain scores were 3.5 in the combination group, 4.2 in ESI patients, and 4.3 in individuals treated conservatively. The mean reduction in arm pain score in the combination group was significantly greater than that in both the conservative and ESI groups and in ESI patients. For neck pain, the mean reduction of pain score in the combination group was significantly greater than that in both the conservative and ESI groups. Three months after treatment, 56.9% of patients treated with combination therapy experienced a positive outcome versus 26.8% in the conservative group and 36.7% in ESI patients. These findings indicate that combination therapy provided better improvement than stand-alone treatment on some measures, but not the primary outcome measure. Further studies on combination therapy will contribute to the development of non-surgical therapy options for individuals with cervical radicular pain.