

Original Article

Prevalence of neuropathic pain in patients with rheumatoid arthritis

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Objective: To study the prevalence of possible neuropathic pain in patients with rheumatoid arthritis (RA) in addition to investigating the correlation between disease duration and occurrence of neuropathic pain.

Methods: A questionnaire containing Brief Pain Inventory by Dr. Cleeland translated into Chinese was given to patients with RA in the rheumatologic outpatient department from March 2008 to June 2008 in a tertiary center in southern Taiwan. Objective sensory testing was also carried out with results recorded in the questionnaire. Latest level of serological markers for inflammation, erythrocyte sedimentation rate and C-reactive protein, of the patient were documented for investigation on possible correlation.

Results: One hundred patients fulfilling the 1987 revised criteria of the American College of Rheumatology for RA participated. Twenty-five patients were excluded due to insufficient background information for analysis. Of the seventy-five patients analyzed, female patients predominated (62 female, 84%), mean age was 55.64 years, average disease duration was 11.08 years, and 67/75 (89.33%) of the patients reported pain within one week prior to the clinic visit. Among the sixty-seven patients complaining of pain, they rated their worst pain intensity as 5.74 (range 1 to 10) on a numeric rating scale, with least pain intensity as 1.78 (range 0 to 9), and pain intensity most of the time as 3.54 (ranged 0 to 10). Among the 67 RA patients complaining of pain upon query, their average disease duration was 11.19 years; allodynia and altered pinprick threshold were found in 40 patients (59.70%) and 47 patients (70.15%), respectively.

Conclusion: Review of the literature states allodynia and altered pinprick threshold to be pathognomonic of neuropathic pain. 53 of the 67 patients (79.10%) complaining of pain showed positive for at least one objective sensory test. Nearly 80% of patients have neuropathic pain. Our study found that disease duration of RA does not correlate well with occurrence of allodynia or altered pinprick threshold. Patients with 2-year duration of RA may demonstrate a positive result for both allodynia and altered pinprick threshold; however, eight out of our seventy-five study subjects (10.1%) with over a 10-year disease duration (range 10-40 years) were negative for both.

Key words: Neuropathic pain, rheumatoid arthritis, allodynia, altered pinprick threshold

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Received: August 1, 2008
Revised: November 4, 2008
Accepted: November 7, 2008

Introduction

Pain is a familiar complaint by patients seeking help from their physician. Patients complaining of different degree of pain are seen in daily rheumatologic practice. Chronic pain is defined as pain lasting longer than 3 to 6 months that may cause varying degree of physical dysfunction and trigger different psychological