

# X ISNIM CONGRESS & III SIPNEI CONGRESS

## CASE REPORT: EFFECTS OF SYSTOLIC EXTINCTION THERAPY IN A PATIENT WITH SEROPOSITIVE RHEUMATOID ARTHRITIS

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**Objective.** Important components of intrinsic pain regulatory systems are modulated by cardiovascular dynamics that influence baroreflex sensitivity (BRS). Various studies have shown BRS is diminished in chronic pain patients compared to healthy controls. Our own study has shown a 62% increase in BRS after systolic extinction training (SET), a cardiac gated electrical baroreceptor training combined with operant-behavior therapy.

**Patient.** A case report evaluated the effects of an outpatient, individual SET in a 66-year old patient with rheumatoid arthritis (RA) comorbid with osteoarthritis (OA), fibromyalgia (FM) and hypertension.

**Outcome Measures.** Clinical pain, BRS, blood pressure, sleep, Disease Activity Score (DAS28), and autoantibodies were assessed before, after and 12 months after the 28-hour-treatment with SET combined with 15mg MTX, 20mg cortisone and Sulfasalazine.

**Results.** The clinical pain was reduced from 70 to 0 (VAS= 0-100) and maintained for 26 weeks. At 27-month follow-up, pain intensity on VAS = 15 for RA, 0 for OA and FM. Blood pressure was normotensive, sleep rhythm normalized, BRS increased to 70.34%, DAS28 changed from 5.26 to 2.88 ( $\leq 3.2$ ). IgM, IgG Rheumatoid Factors and anti-CCP-antibody had returned to normal values.

**Conclusion.** The results suggest that SET, by restoring BRS activation, is synergistic with pharmacotherapy in reducing inflammation and/or pain in RA, OA and FM.