WOUND HEALING

CHEMICAL LUMBAR SYMPATHECTOMY IN THE TREATMENT OF RECALCITRANT ERYTHROMELALGIA

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Introduction: Erythromelalgia is highly disabling and treatment is often very challenging. There have been solitary case reports that it might benefit from sympathectomy.

Objective: This study is to evaluate the short-term and long-term efficacy of chemical lumbar sympathectomy (CLS) for treatment of recalcitrant erythromelalgia and try to identify a CLS-responsive subset.

Materials and Methods: Patients with recalcitrant erythromelalgia were recruited from a tertiary hospital over a 10-year period. L3-4 CLS was performed using 5% phenol. The pain intensity score (visual analog scale, VAS 0-10) was assessed before CLS and at one day, one week, three months, six months, one year and two years after CLS. A VAS decrease of 90-100% is defined as “Complete response” (CR), 60-89% as “Major partial reponse” (MaPR). Relapse was defined by a return of VAS≥ 5. SCN9A gene mutations were screened.

Results: Thirteen patients were enrolled, with a median age of 15 years. The mean follow-up was 6.2 ± 3.8 years. SCN9A gene mutation was identified in five patients having family histories. VAS was 8.2 ± 2.0 at baseline; it decreased to 4.9 ± 2.7 at one day and 1.9 ± 3.0 at one week after CLS. Nine patients (69.2%) achieved CR at one week after CLS, including three patients with SCN9A gene mutation. Among the three CR patients having the gene mutation, two declined to MaPR and one got relapse at two years after CLS. Among the six CR patients without mutation, five maintained CR and one got relapse. Among the four patients who did not achieve CR, one patient died at 3.5 months and one patient performed amputation at 4 months after CLS.

Conclusions: CLS provides a valid option for treatment of recalcitrant erythromelalgia. It takes about one week to achieve full efficacy. Relapse may occur, especially in patients with SCN9A gene mutation.