

통증 및 근골격재활

발표일시 및 장소 : 10 월 26 일(금) 14:51-15:03 Room E(5F)

OP- Scientific 2-4

Effects of prolotherapy using platelet-rich plasma for chronic non-specific low back pain

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INTRODUCTION

Chronic low back pain is a common problem for which there is currently no effective intervention. Patient with chronic non-specific low back pain is weakened ligament, and prolotherapy is the effective treatment but their use remains controversial. These ligaments can be strengthened by platelet-rich plasma prolotherapy. We hypothesized that the effectiveness of prolotherapy using platelet-rich plasma may decrease pain and improved disability of patient with chronic low back pain Introduction This study was a prospective, double-blind, randomized controlled trial. Thirty-four patients with chronic non-specific low back pain were randomized to platelet-rich plasma injection and lidocaine injection. Patients were treated with weekly platelet-rich plasma or lidocaine injections at the lumbopelvic ligaments for 2 weeks and then weekly prolotherapy with 15% glucose for 2 weeks and followed up 6 months. Visual analog scale, Oswestry Disability Index and Roland-Morris Disability Questionnaire were evaluated at initial, 4weeks, 3 months, and 6 months. Four patients did not complete this trial. Three were in the platelet-rich plasma injection and one was in the lidocaine injection.

RESULTS

The intensity of pain was significantly decreased in platelet-rich plasma injections at 6 months as compared lidocaine injections. (Figure 1) All participants were significantly decreased pain and disability index (Figure 2) at 4 weeks, 3 months, and 6 months but there were no significant differences between groups except for visual analog scale at 6 months. The baseline parameters were no significant differences in both groups. (Table 1)

CONCLUSION

The platelet-rich plasma prolotherapy is an effective intervention in chronic non-specific low back pain. And injection at the lumbopelvic ligaments is also an effective treatment.

Table 1. Baseline Parameters

Variables	Lidocaine injection (n=16)	Platelet-rich plasma injection (n=14)
Male	6 (37.5%)	6 (42.9%)
Female	10 (62.%)	8 (57.1%)
Age (years)	50.5 ± 17.0	51.0 ± 18.1
Body mass index	25.1 ± 4.1	22.9 ± 2.7
Duration of Pain (months)	12.7 ± 13.5	16.2 ± 16.7

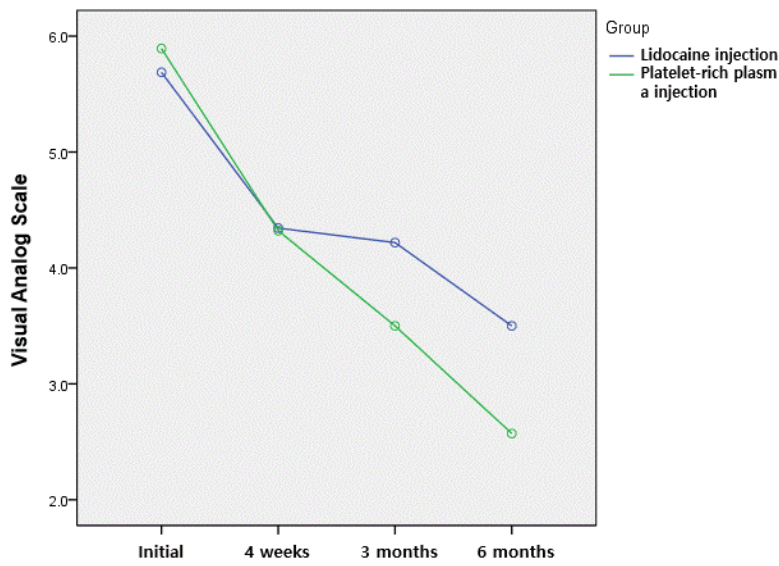


Figure 1. Visual analog scale scores of both groups at initial and subsequent follow-ups.

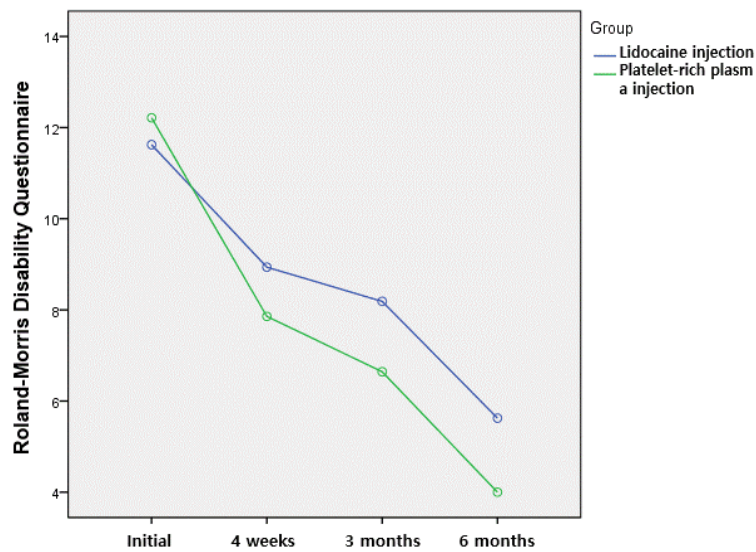


Figure 2 Roland-Morris Disability Questionnaire of both groups at initial and subsequent follow-ups.