

통증 및 근골격재활

게시일시 및 장소 : 10 월 18 일(금) 08:30-12:20 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 10:00-10:45 Room G(3F)

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Comparison of the effect according to type of interventions to patient with lumbar facet joint pain

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Introduction

Facet joints are considered to be a common source of chronic axial back pain. Facet joint interventions including medial branch nerve block (MBB) and intra-articular injections (IA) are used to manage lumbar facet joint pain. Studies comparing the effect of MBB and IA have been already reported. However, the study comparing the therapeutic efficacy of the combination of the two interventions and each intervention separately have rarely been reported.

Objective

The purpose of this study was to compare the efficacy of pain relief when MBB, IA, or both of the two methods combination (MBB+IA) were administered to patients with lumbar facet joint pain.

Method

This study retrospectively reviewed patients who underwent lumbar facet intervention from November 2016 to May 2019. Among these patients, 44 patients recorded Oswestry Disability Index (ODI) and Number Rating Scale (NRS) before injection and within 6 weeks of injection were enrolled. The ODI and NRS were used to assess patient's subjective pain and functional impairment secondary to the pain. We divided three groups according to the type of intervention. MBB group included 20 patients and IA group and MBB+IA group included 12 patients each.

Results

The ODI and NRS were found to be significant decreased after the intervention in all three groups. The change in ODI and NRS before and after the procedure were 4.9(p=0.001) and 1.3(p=0.002) in MBB group, 4.58(p=0.036) and 1.59(p=0.012) in IA group, and 4.75(p=0.019) and 1.25(p=0.032) in MBB+IA group, respectively (Table 1). Meanwhile, when the effects of intervention were compared among three groups, there

was no difference in the change of ODI and NRS before and after treatment in the three groups (Table 2).

Conclusion

Although MBB, IA, and MBB+IA contributed to reducing ODI and NRS, respectively, there was no procedure for better efficacy of these interventions in lumbar facet joint pain.

Table 1. Parameters of pre- and post- intervention

Group	Evaluation value	Pre	Post	Δ	p
MBB	ODI (n=20)	23.15 (± 7.53)	18.25 (± 7.38)	-4.9	0.001*
	NRS (n=20)	5.35 (± 1.69)	4.05 (± 1.82)	-1.3	0.002*
IA	ODI (n=12)	22.75 (± 6.23)	18.17 (± 9.82)	-4.58	0.036*
	NRS (n=12)	6.17 (± 1.47)	4.58 (± 1.56)	-1.59	0.012*
MBB+IA	ODI (n=12)	19.58 (± 10.08)	14.83 (± 7.21)	-4.75	0.019*
	NRS (n=12)	5.17 (± 1.90)	3.92 (± 2.31)	-1.25	0.032*

Δ means (Post – Pre) values.

*means statistical significance.

Table 2. Comparing effect of intervention among groups

Evaluation value	Group	Δ	p
ODI difference	MBB	-4.9	0.947
	IA	-4.58	
	MBB+IA	-4.75	
NRS difference	MBB	-1.3	0.887
	IA	-1.59	
	MBB+IA	-1.25	
ODI reduction rate	MBB	19.15 %	0.668
	IA	23.14 %	
	MBB+IA	20.36 %	

Δ means (Post – Pre) values.