

## 요천추 신경증에 의한 하지방사통의 미추경막외 주사 치료

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= Abstract =

### Caudal Epidural Injection in Treatment of Lumbosacral Radicular Leg Pain

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**A**n spinal epidural injection is a relatively benign procedure and widely used for symptomatic relief of back and radicular leg pain. The authors evaluated the efficacy of caudal epidural injection with corticosteroids and local anesthetics which was performed by a neurosurgeon for the treatment of ongoing lumbosacral radicular symptoms.

Between July 1997 and June 1998, 20 patients with back pain and radiating leg pain involving lumbosacral degenerative spine disease, who refused operation or were unsuitable for general anesthesia, were treated and followed for more than 6 months. All procedure was done under radiographical guidance aseptically. The authors used the mixed solution of 1% lidocaine(6 cases) or 0.25% bupivacaine(14 cases) with methylprednisolone acetate(1 - 2ml). The mean total volume of the mixture was 15.6 ml. The preoperative neurosurgical diagnosis included 11 lumbar disc herniation, 6 lumbar stenosis and 3 spondylolisthesis and the involved nerve roots presenting with typical radiculopathy were L5 root(17 patients), S1 root(15 patients), L4 root(4 patients), and S2 root(1 patient). The responses from patients were classified into 4 groups, and excellent or good results with marked reduction on radicular leg pain were noted in 19 cases. There were a few transient complications such as headache, leg numbness, perisacral hypesthesia, injection pain, constipation and malpositioned spinal needle.

The authors suggest that the caudal epidural injections is a reasonable alternative to spinal surgery if patient's pain is severe enough and you are exhausted other methods to relieve the pain.

**KEY WORDS** : Pain · Lumbosacral radiculopathy · Caudal epidural injections · Steroid · Local anesthetics.

서 론

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가

가

85 90%

4)7)

1)2)8)27)28)

## 재료 및 방법

### 1. 연구대상 및 방법

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Fig. 1. The photograph of operative representation depicting the direction of the spinal needle which is parallel to sacral plane. The position of patient is lateral decubitus and the spinal needle was introduced under fluoroscopic guidance.

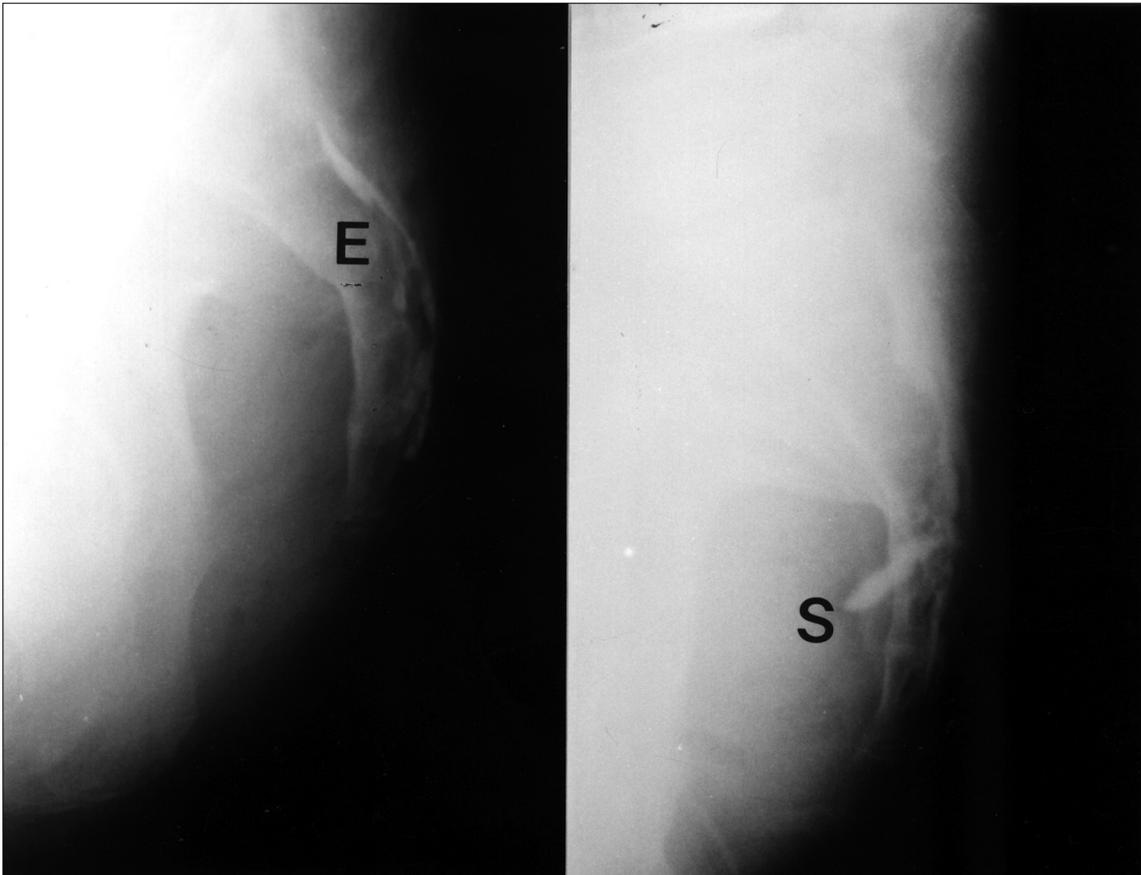


Fig. 2. The lateral sacral view of correctly located caudal epidural injection of contrast medium revealing free flow through sacral canal(Left, E), and of malpositioned needle in soft tissue dorsal to canal(Right, S).

2. 시술방법

가 (Fig. 1). (1ml  
1% lidocaine 1ml ) , 가  
22G- 가 3  
가 2  
가 2cm 10ml  
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4 가 (Isovist)  
가 1ml  
(Fig. 2). (1 : 200,000 ep-  
inephrine 0.25% bupivacaine 1% lidoca-  
ine) (depomedrol : methylprednisolone ac-  
etate 40mg/ml)  
2  
가 depome-  
drol 1ml(5 ) 2ml(15 )  
1% lidocaine 6 , 0.25% bupiv-  
acaine 14 lidocaine 5  
10ml, 1 20ml bupiva-  
caine 11ml 20ml  
8 (40%) 15ml

	12ml	22ml
	15.6ml	
	중	례
53	4	4/5
		7

5



Fig. 3. L-spine sagittal T2 weighted image of 53-years old male(Case 11) shows disc extrusion on right side of L4/5 interspace with marked compression of thecal sac.



**Table 2.** Result of preoperative neurological findings

Physical examination	No. of cases
Motor weakness	6
Sensory change	9
Reduced reflex	6
Neurogenic claudication	5
Laseque's test( + )	13
Walking difficulty	5
Involved nerve root	
L4	4
L5	17
S1	15
S2	1

**Table 3.** Temporary complications after injections

Complication	No. of cases
Headache	1
Leg numbness	1
Perisacral hypesthesia	2
Injection site pain	1
Correctable malpositioned needle	2
Constipation	1

고 찰

1)8)27)28) 가 , , 22.7% , , 1952 Robecchi Capra 13 16 Ryan<sup>21)</sup> depomedrol bupivacaine 가 11 가 60 가 9 가 4) 가 7) morphine

가 6)14)17)21) sinuvertebral 가 가 24 1 3)10)11)14)18)23)24) 5)6)9)21)22)26) hydrocortisone, prednisone, methylprednisolone, tramcinolone depomedrol(methylprednisolone acetate) 40mg (1ml) 80mg(2ml) 84% 가 14)26) 9) 1 59.1%, 6) 가 11 가 60 가 9 가 4) 가 7) morphine



5 1  
8

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