EFFICACY OF EPIDUROSCOPY ADMINISTRATION IN PATIENTS WITH FAILED BACK SURGERY SYNDROME

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INTRODUCTION

Failed back surgery syndrome (FBSS) may be defined as persisting or relapsing back and/or leg pain due to several conditions after back surgery. FBSS incidence is estimated between 5-50 % range after lumbar spine or vertebrae surgery (1). In the USA 7 million new low back pain sufferer appear each year and 200.000 of them are applied Lomber spinal surgery. 20% of them are re-operated by reason of lasting pain (2). So approximately 40.000 new FBSS cases occur in USA every year and relief of back and radicular pain symptoms of these patients becomes necessary. In our study ; we aimed to evaluate the efficacy of epiduroscopy procedure for patients that had been diagnosed as failed back surgery syndrome with persisting back and leg pain.

MATERIALS – METHODS

28 patients who had admitted to Sakarya University Training Research Hospital between years 2013-2014 and had epiduroscopy indication were included in the study. Demographic data were recorded. Patients were taken to operating room and were given prone position. Antiseptic solution was used to clean the skin. Conscious sedation was administrated via midazolam, fentanyl and propofol. Intervention site was anesthetized with 1% lidocaine. After epiduroscopy was placed with Seldinger technique into sacral hiatus, epidurography was performed with 10 ml non ionic contrast agent. Fibrotic tissues were cleaned. The epidural adhesions were separated with epiduroscopy tip in epidural space. Patients were hospitalized one day and the day after procedure they were discharged from the hospital. Data of visual analog scale (VAS) scores, Oswestry disability Index (ODI) scores and neuropathic pain questionnaire (DN-4) scores were evaluated retrospectively. VAS, ODI and DN-4 scores before epiduroscopy and at 1st and 3rd months after the procedure were compared. SPSS IBM 20 program was used for the statistical analysis.

RESULTS

Average age of the patients was 56.9 ± 15.65. When preoperative VAS scores were compared with postoperative 1st and 3rd month VAS scores; both postoperative VAS scores were significantly lower ($p<0.05$, Table-1). When postoperative 1st and 3rd month ODI scores compared with preoperative ODI scores, improvement was observed after the procedure ($p<0.05$, Table-1). Similarly, alteration in DN-4 scores was in correlation with VAS and ODI scores ($p<0.05$, Table-1).

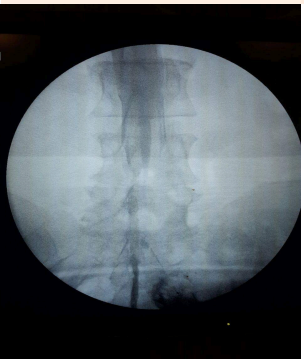

Figure 1: Epidurogprapy in a patient FBSS

Figure 2:Epidurograpy in a patient with FBSS (Patient has posterior stabilizatipn)

	Pre-op.	Post-op. 1st month	Post-op. 3rd month	P
VAS	7.96	5.04	4.43	<0.05
ODI	69.21	42.39	38.36	<0.05
DN-4	3.82	2.21	2.15	<0.05

Table-1. Change in VAS, ODI and DN-4 scores of the patients that had undergone epiduroscopy according to time.
$p<0.05$, significance of the postoperative 1st and 3rd month values when compared with preoperative values.

CONCLUSION

Epiduroscopy is a minimal invasive procedure that allows to direct visualization and treatment of the pathologies in epidural space. Besides, it's useful for several therapeutic interventions like lysis of epidural adhesions, steroid injections, decompression of the epidural space for reducing the peri-radicular and dural inflammation and improving the physiological mobility of neural structures. We concluded that epiduroscopy was a method that reduced pain scores, improved functional status and the neuropathic pain level of the patients with FBSS

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