

# Narrow canal and laminectomy women cases taken under spinal anesthesia

## Abstract

Among the superiorities of regional anesthesia over general anesthesia are: Complications such as a decrease in functional residual capacity in the lungs, and infections such as infection are less likely to develop after general anesthesia. Decreased blood loss in the intra operative period; in the post operative period, Preferred reasons are decreased nausea-vomiting frequency and analgesic requirement, decreased vein thrombus and pulmonary embolism. Necessary permission obtained from legal representat. Spinal anesthesia was applied to patients 50 females, who underwent spinal surgery (20 spinal stenosis, 64 laminectomy) between November 2012 and September 2013 at the State Hospital. The age distribution of the patients was the smallest 23 and the largest 77. 33 of the patients; 12.5mg heavy marcain and 25mcg fentanyl were administered intrathecally to the patients with a 25G pencil point spinal needle. Patients were given 1mg midazolam for sedation.

**Keywords:** women, spinal anesthesiology, laminectomy, surgery

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## Introduction

Epidural and spinal anesthesia applications are becoming more common in lumbar discectomy and laminectomy surgery.<sup>1-6</sup> Among the superiorities of regional anesthesia over general anesthesia are: Complications such as a decrease in functional residual capacity in the lungs, and infections such as infection are less likely to develop after general anesthesia. Decreased blood loss in the intra operative period; in the post operative period.

## Case report

Preferred reasons are decreased nausea-vomiting frequency and analgesic requirement, decreased vein thrombus and pulmonary embolism necessary permission obtained from legal representat. Spinal anesthesia was applied to patients 50 females, who underwent spinal surgery (spinal stenosis, and laminectomy) between November 2012 and September 2013 at the State Hospital. The age distribution of the patients was the smallest 23 and the largest 77. 33 of the patients. 12.5mg heavy marcain (0.5% bupivacaine hydrochlorure) and 25mcg fentanyl citrate were administered intrathecally to the patients with a 25G pencil point spinal needle. Patients were given 1mg midazolam for sedation operation times were 30-180 minutes. Hypotension was observed in only 5 patients during the operation, (20% decrease in basal blood pressure was accepted as hypotension). Hypotension responded to ephedrine applications. Through out the operation, the block level did not rise above T8 in anypatient. No additional analgesic was required. No complications were observed.

## Discussion

There are fewer peri operative complications such as nausea and deep vein thrombosis with spinal anesthesia. Neurological complications have not been determined after spinal anesthesia, head

ache due to dura material puncture has been observed rarely and it has been stated that spinal anesthesia is an effective and safe alternative method to general anesthesia<sup>1</sup> Smrcka et al.,<sup>3</sup> argued that when lumbar disc surgery cases are performed under epidural anesthesia, the surgeon's dialogue with the patient facilitates decompression. At the end of the post operative 3rd year, no negative response was obtained from patients who were asked about the degree of complaint or dissatisfaction with the operation. Study of McLain et al.,<sup>4</sup> containing 400 patients who underwent lumbar laminectomy. In various clinical studies, including high anesthesia, blood pressure and heart rate were observed to be high in the screening unit. In those who underwent spinal anesthesia :It was reported that total anesthesia time was shorter with surgery, post operative pains cores and analgesic requirement were lower, and that nausea-vomiting, urinary retention and pulmonary complications developed less.<sup>1,2,7</sup>

In lumbar disc surgery patients, it is observed that spinal anesthesia provides hemodynamic stabilization by protecting peri operative blood pressure and heart rate equivalent or better than general anesthesia.<sup>2</sup> The change in position performed immediately after induction in general anesthesia can cause hypotension due to impaired postural sympathetic reflexes and affects negatively.<sup>8,9</sup> While the level of spinal anesthesia is below the T8 dermatome, hemodynamics is better preserved than general anesthesia in patients brought from the supine position to the prone position, since the compensation mechanisms of the autonomic nervous system are better protected.<sup>6</sup> It has been reported that there is less blood loss in lumbar spinal surgery, limb orthopedic and vascular system surgeries performed under regional anesthesia compared to general anesthesia.<sup>5</sup> Peripheral venous pressure falling during lumbar epidural anesthesia in areas under anesthesia. It decreases blood pressure due to artery, arteriole vein dilatation. In addition, it reduces arterial and venous leakage to the surgical field, and due to the preservation of spontaneous ventilation in the prone position, venous leakage is prevented by decreasing the distention of epidural veins so that the surgical field it is claimed that the view is easier. Post operative tremor, which can be seen after general anesthesia, can increase pain, coronary; It may disrupt the general condition by causing more oxygen requirement in arterial patients.<sup>10</sup>

When putting on regional anesthesia indication, the duration of the operation and the psychological status of the patient should be taken into consideration. Less observation of positional complications can be considered as the biggest advantage of regional anesthesia in these operations. An unconscious operation of someone who is not accustomed to the operating room can create a psychological trauma. A mild sedation can reduce this trauma. Regional anesthesia can be used effectively and safely in posterior and posterolateral spinal surgery types, single or double level laminectomies under regional anesthesia. In spinal or epidural anesthesia in vertebral surgery, the advantage of regional anesthesia for general anesthesia is to prevent complications such as brachial plexus injury, peripheral nerve injury, pressure necrosis in the face and jaw, by placing the desired position on the elbow, arm and jaw. Also, with a small amount of medication, it is virtually devoid of systemic pharmacological effects. It is suggested that surgical anesthesia can be provided as an advantage of spinal anesthesia.<sup>11</sup> As a result; Although the advantages of spinal anesthesia are that bleeding at the time of the operation and reducing the duration of the operation room, providing more effective post operative analgesia; We believe that spinal anesthesia can be safely performed in lumbar discectomy and/or laminectomy operations.

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### Conflicts of interest

The author declare that is no conflicts of interest.

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