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### Transient neurological symptoms with subarachnoid lidocaine: Effect of early mobilization

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**Background:** Although lidocaine has been used extensively for spinal anesthesia since its introduction into clinical practice in 1949, it has been associated with transient neurological symptoms (TNS) only in the past ten years<sup>1</sup>. The fact that TNS have never been observed before 1993 may be explained on the basis that the symptoms are often mild and self-limiting. Alternatively, TNS are the result of a change in the practice of spinal anesthesia with lidocaine in recent years. One of the most dramatic changes in the practice of spinal anesthesia is early ambulation as opposed to traditional 24 h recumbency. The aim of this study was to investigate a possible effect of the time of ambulation after lidocaine spinal anesthesia on the incidence of TNS.

**Methods:** Following hospital ethics committee approval and informed consent, 60 patients (ASA 1-2, 18-70 years) scheduled for minor surgery under spinal anesthesia were enrolled. Spinal anesthesia was established using a 27 gauge Quincke needle and a paramedian approach at the 3<sup>rd</sup> lumbar interspace with lidocaine 60 mg. After surgery, patients were randomly allocated to two groups of 30 patients each. Patients in group 1 were ambulated as soon as possible, whereas patients in group 2 were kept recumbent until 6 hours after subarachnoid injection.

Two days after surgery, patients were contacted by a blinded observer and interviewed using a standardized questionnaire. TNS were defined as any feelings of pain or discomfort localized in the buttock(s) or the leg(s) in the postoperative period. Patients were asked to express the intensity of the pain/discomfort on a verbal rating scale (VRS) from 0 (no pain) to 10 (worst pain imaginable).

**Results:** Patient characteristics and the incidence and severity of TNS are presented in the Table. In all patients, symptoms resolved completely within 6-24 hours.

	Group 1 (Early) (n = 30)	Group 2 (Late) (n = 30)
M / F	22 / 8	19 / 11
Age (yr) (mean ± SD)	45.5 ± 15	44.8 ± 12
Lithotomy position	12	12
TNS +	7 (23 %)	8 (27 %)
VRS (median (range))	5 (2 - 8)	7 (1 - 8)

Two patients had signs of postdural puncture headache. Symptoms were mild, resolving spontaneously within a few hours without treatment.

**Discussion:** Under the conditions of this study, there was no correlation between the time of ambulation after spinal anesthesia with lidocaine and the incidence of TNS.

**References:** 1. Anesthesia and Analgesia 1993;76:1154-1157.