

Publication

Amaurosis after spine surgery : survey of the literature and discussion of one case

JournalItem (Reviews, Editorials, Rezensionen, Urteilsanmerkungen etc. in einer wissenschaftlichen Zeitschrift)**ID** 1197326**Author(s)** Zimmerer, Stephan; Koehler, Markus; Turttschi, Stephanie; Palmowski-Wolfe, Anja; Girard, Thierry**Author(s) at UniBasel** [Girard, Thierry](#) ; [Palmowski-Wolfe, Anja](#) ;**Year** 2011**Title** Amaurosis after spine surgery : survey of the literature and discussion of one case**Journal** European spine journal**Volume** 20**Number** 2**Pages** 171-6

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Postoperative vision loss (POVL) associated with spine surgery is a well known, albeit very rare complication. POVL incidence after spinal surgery ranges from 0.028 to 0.2%; however, due to the increase in number and duration of annual complex spinal operations, the incidence may increase. Origin and pathogenesis of POVL remain frequently unknown. A 73-year-old patient presented with lumbar disc herniation with associated neurological deficits after conservative pre-treatment at a peripheral hospital. Known comorbidities included arterial hypertension, moderate arterial sclerosis, diabetes mellitus type 2, mildly elevated blood lipids and treated prostate gland cancer. During lumbar spine surgery in modified prone position the patient presented with an acute episode of severe hypotension, which required treatment with catecholamines and Trendelenburg positioning. Three hours postoperatively, a visual loss in the right eye occurred, resulting in a complete amaurosis. Antihypertensive medication, arteriosclerosis and intraoperative hypotension are possible causes for the POVL. Intraoperative administration of catecholamines and Trendelenburg positioning for treatment of systemic hypotension might further compromise ocular perfusion. In patients with comorbidities compromising arterial blood pressure, blood circulation and microcirculation, POVL must be considered as a severe postoperative complication. It is recommended to inform patients about such complications and obtain preoperative informed consent regarding POVL. Any recent modification of antihypertensive medication must be reported and analysed for potential intraoperative hemodynamic consequences, prior to spine surgery in prone position.

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