Reviewer's report

Title: Epidural lipomatosis and congenital small spinal canal in spinal anesthesia: a case report

Version: 3 Date: 17 April 2008

Reviewer: Elmar Hans Pinkhardt

I am familiar with the literature and believe that this case meets one of the 9 criteria for evaluation in the journal: An unexpected event in the course of observing or treating a patient

Has the case been reported coherently?: No

Is the case report authentic?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: No

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

General
In this text the authors report a case of a 25 year old woman who suffered from neuropathy after spinal canal anaesthesia. The authors conclude that constricted nerve root mobility caused by a combination of a congenitally small spinal canal and epidural lipomatosis may be a potentially dangerous combination in conjunction with spinal anaesthesia. They point out that epidural lipomatosis as a risk factor for spinal anaesthesia has not been discussed in the literature previously.

Revisions necessary for publication

Abstract
This could be more clear. Especially “Introduction” and “Conclusion” should be thoroughly focused.
Introduction
The authors may address the issue of existing MRI based classifications of (spinal) epidural lipomatosis and its association with specific clinical symptoms.

Case presentation
The major shortcoming of the paper is that the authors missed to define the exact amount of unencapsulated fat in the epidural space in this special case, as a small amount of abnormal accumulation is not considered to be pathological by itself. Borre et al. (Borre DG, Borre GE, Aude F, Palmieri GN. Lumbosacral epidural lipomatosis: MRI grading. Eur Radiol 2003;13:1709–21.) developed a classification of lumbar spinal epidural lipomatosis (SEL) by the ratios of the anterior posterior diameters of the dural sac, the spinal canal and the epidural lipomatosis. A grading from 0 (normal) to III (severe reduction in the dural sac diameter) was defined. Although of ongoing discussion, it could be shown in several retrospective studies that the diagnosis of SEL has to be based on the combination of clinical symptoms and MRI findings. A recent publication on this topic should be referenced.

Hence a detailed description of epidural lipomatosis in this special case is crucial to support the authors’ statement.

Discussion
The argumentation is not clearly structured, it could be more concise, the above mentioned MRI based classification criteria with respect to the case presented here should be incorporated in the text.

General
The text should be corrected by a native English speaker.

Quality of written English: Needs some language corrections before being published

Declaration of competing interests:
I declare that I have no competing interests