Reviewer’s report

**Title:** Cauda Equina Compression in Achondroplastic Dwarf. Is complex anterior and posterior surgical intervention necessary?

**Version:** 3  **Date:** 15 August 2008

**Reviewer:** Panagiotis Korovessis

**Reviewer’s report:**

The authors report on a case with spinal stenosis and cauda equine compression in a achondroplastic or chondrodysplastic dwarf which was operatively treated by means of combined, stages anterior plus posterior decompression and stabilization.

I congratulate these authors for performing such a demanding surgery. However, it seems that the authors had not planned from the beginning the combined approach but they decided it first 6 months following anterior decompression and stabilization with plate and screws. The authors should make clear why they did so.

Furthermore, with respect to the authors^ description and definition of the pathology, I believe that this is a classical case of congenital hemivertebra, since hemivertebra is not a feature of achondroplasia, as these authors also mentioned it.

The authors should add preoperative and postoperative myelograms or CTs or MRIs showing the compression preoperatively and postoperatively since they argued that there was a rest compression shown in the postoperative myelogram.

There is no postoperative and follow up lateral roentgenograms. This is very important since these authors underlined the significance of sagittal alignment.

The paragraph in the case presentation describing the operative technique is not clear and confusion in some instances. So, it is not clear if the first performed operation was anterior (?) or posterior ? Please rewrite this paragraph.

Case presentation , Paragraph 2: Add myelogram to show compression.

In same paragraph, image 1? Should be Figure 2 (CT). Please correct.

In the same paragraph. The authors say : «a partial posterior L1 and L2 vertebrectomy…» I think this should be re-written to make sense.

Paragraph 4 : Images 2 and 3 is only one : the Figure 3.

Paragraph 5 : Add a mylograph to show the residual compreesion.

Figures 3 and 4 : It is the same intraoperatively taken photo.

Did the authors stabilize the spine after the wide laminectomy and decompression ? Please add lateral roentgenograms to show it.

Page 5. The authors mentioned plain radiographs and myelogram. They should
add some of them.

In the discussion section the authors should make clear why they decided the anterior approach first despite the relative literature speaks for posterior only.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable