Reviewer's report

Title: Cervical myelopathy caused by atlantoaxial instability in a patient with total aplasia of the posterior arch of the atlas: a case report

Version: 1 Date: 21 March 2012

Reviewer: Savas Deftereos

Comments to authors:

Is the case report authentic? Yes

Is the case report ethical? Yes

Is there any missing information that you think must be added before publication? Yes. More specific: The frequency and clinical significance of congenital defects of the posterior (and why not anterior arch of the atlas).

Is this case worth reporting? Based on the rarity of this condition: Yes. Otherwise: No

Is the case report persuasive? Yes.

Does the case report have explanatory value? Not so strong value. Authors must be describe the differences if there are any between partial and total aplasia of posterior arch of atlas from imaging, clinical and management point of view.

Does the case report have diagnostic value? Yes (to make us suspicious for not so common situations).

Will the case report make a difference to clinical practice? Because of its rarity I think No

Is the anonymity of the patient protected? Yes

In Fig three (Fig. 3: Computed tomography (CT) images of the cervical spine. Complete absence of the posterior arch of the atlas with an anterior cleft (A) was observed. The …). (A) is not consist with “anterior cleft”, is just Figure label.

What is the value of three dimensional computed tomography? Vertebral arteries could be observed (if there is any reason) with Color Doppler Sonography or with Initial CT (+contrast media) and a simple MPR (multi planar reconstruction).

…(Fig. 4: LEXI co. Tokyo, Japan). What does “LEXI co. Tokyo, Japan” mean?

Quality of written English: Acceptable