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: 18 March 2012

Reviewer: Shinji Kimura

Which of the following best describes what type of case report this is?: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

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?: No

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

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?: No

Is the anonymity of the patient protected?: Yes

Comments to authors:

The author reports a rare case with detailed discussion. This case report would be valuable for the publication.

I have some comments as follows:

This is a case report, but not discussed regarding the surgical procedure. Therefore, the author may delete the following sentences (page 5, paragraph 2, line 6), "Because we chose to perform long fusion, we used pedicle screws for the caudal implant (C3 and 4). Jones et al. made a biomechanical comparison of the pull-out strengths of lateral mass and pedicle screws in the human cervical spine. Cervical pedicle screws demonstrated about two-times higher resistance to pull-out forces than lateral mass screws [14]."

This case was accompanied with os odontoideum, resulting in the neurological
deficit. If the previous report described the presence of os odontoideum, please add this issue in the discussion.

**Quality of written English:** Acceptable

**Declaration of competing interests:**

I declare that I have no competing interests.