Reviewer's report

Title: Thoraco-lumbar hyperostosis and enchondromatosis in a girl with achondroplasia

Version: 4 Date: 30 January 2008

Reviewer: Gen Nishimura

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

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?: Yes

Comments to authors:

The present case merits the publication. Association with enchondroma-like metaphyseal abnormalities and diffuse calcification or ossification of the spinal longitudinal ligaments in an achondroplastic child is interesting. The latter may make a difference in the clinical management. However, the manuscript requires major revision. First, metaphyseal changes of the knee in the present patient do not represent real enchondroma but enchondroma-like metaphyseal dysplasia. The finding is probably related to impaired terminal differentiation of chondrocytse in a small subset of achondroplastic patients. The impaired terminal differentiation also may cause ectopic endochondral ossification of the spinal ligaments. So, I hope that the authors will discuss the pathogenic link between metaphyseal changes and spinal ankylosis in the present patient. The description of the general comments on achondroplasia in the first paragraph in discussion is somewhat redundant; so it should be more concise.

What next?: Revise and resubmit

Quality of written English: Acceptable