Letters to the Editor

Steven J. Tredwell

Department of Orthopedic Surgery, University of British Columbia, Vancouver, B.C., Canada

Dear Sir,

I am writing in reference to the recent publication of *Craniovertebral abnormalities in Down’s syndrome* by Menezes and Ryken [1]. The authors differ from the series from the Children’s Hospital in Vancouver in two details, which on further examination may not be true differences. Menezes and Ryken comment on the apparent difference in the occipital subluxation in our series as compared with theirs. It must be appreciated that the two series had vastly different selection criteria. The Vancouver series was of a group of patients presenting for biochemical screening who did not have symptoms referable to the neck. This nonselected series was used to attempt to define natural history and occurrence, and therefore cannot be compared to a group of 18 patients preselected on the basis of cervical symptoms. The natural history of the group from which these 18 patients arose is of course unknown.

We also take exception to using the odontoid basion relationship to determine craniovertebral instability in a patient group who may have instability between the base of his skull C1 and/or C1-C2. Elkoury’s series of 40 patients were actually normal subjects without the bivertebral instability that can be seen in the Down’s group

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Reference

Menezes AH, Ryken TC: Craniovertebral abnormalities in Down’s syndrome. *Pediatr Neurosurg* 1992; 18:24-33.
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Reply

Dear Sir,

I have reviewed the letter by Dr. Tredwell regarding the recent publication on ‘Craniovertebral Abnormalities in Down’s Syndrome’. We appreciate the fact that the Vancouver series was prospectively reviewed in 64 individuals. This has been stated as such in our discussion. The difference is that several of their patients had a predental space ranging from 2-22 mm and out of these only 1 was symptomatic. This greatly differs from the symptomatic patients that we have described with similar instability. We have made no attempt to compare the natural history, as has been eluded by the article by Tredwell et al. [1]. However, we feel strongly that severe atlanto-axial dislocation and occipi-tocervical instability of the magnitude described requires surgical attention.

We take strong exception to the statement that our determination of craniovertebral instability is based on the ‘odontoid-basion relationships’ as eluded by Dr. Tredwell. There are several parameters that are utilized to determine craniocervical instability, as has been expressed in the current article, and in our previous publications. The reference to Dr. ElKhoury’s series is out of context.