Skeletal X-ray and dental methods in child victims of the Southeast Asian Tsunami

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The recent publication of Varkkola et al. on the skeletal X-ray and dental methods of assessing the ages of child victims of the Southeast Asian Tsunami is very informative [1]. I should like to share some of my thoughts about this work. These researchers found that “dental methods proved to be most accurate in childhood until the teeth—with the exception of wisdom teeth—have erupted and root development is completed [1].” I agree with the findings. However, I have reservations about the universal applicability of the dental method. In Southeast Asia, problems might arise if the method is used to assess the ages of local child victims. The incidence of the congenital hematological disorders, thalassemia and hemoglobinopathy, is very high in this area. These disorders can cause disturbance of the bony and dental structures [2]. When this method of age assessment is applied in cases of congenital hematological disorder, the estimated age derived is usually 3 years younger than the actual chronological age [3].

Hence, an adjustment of the estimated age might be necessary in cases that display evidence of congenital hematological disorders (thin cortices and medullary widening).

References

1. Varkkola O, Ranta H, Metsäniitty M, Sajantila A. Age assessment by the Greulich and Pyle method compared to other skeletal X-ray and dental methods in data from Finnish child victims of the Southeast Asian Tsunami. *Forensic Sci Med Pathol*. 2011. doi: [10.1007/s12024-010-9173-x](https://doi.org/10.1007/s12024-010-9173-x).
2. De Mattia D, Pettini PL, Sabato V, Rubini G, Laforgia A, Schettini F. Oromaxillofacial changes in thalassemia major. *Minerva Pediatr*. 1996;48(1–2):11–20.
3. Christoforidis A, Badouraki M, Katzos G, Athanassiou-Metaxa M. Bone age estimation and prediction of final height in patients with beta-thalassaemia major: a comparison between the two most common methods. *Pediatr Radiol*. 2007;37(12):1241–6.

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