

## Authors' Response to *J Forensic Sci* 2009;54(2):506

Sir,

We would first like to thank our colleagues for their interest in our paper. The aim of the paper was to assess whether frontal sinuses can be used to identify subjects within family groups.

The frontal sinuses as anatomical parameters for identification purposes have long been used and, in particular, after the studies of Yoshino, they have been considered reliable and are normally applied in forensic practice. As our work refers to family groups and does not include pairs of twins, the frontal sinus parameters studied for identification purposes are much more detailed than those applied for clinical and anatomical purposes. "Intrapair similarity" of the frontal sinuses, as reported in (1), presents too few modes to be useful from the identification point of view. The non-significant difference of "intrapair similarity" does not imply the impossibility of identification according to Cameriere's method.

As regards the consideration of Latiff et al. on the evolution of the frontal sinuses during development, we agree with the above authors on the difficulty of using them for identification purposes. In particular, in (2) we deliberately did not examine subjects under 15 years of age, due to the incomplete formation of their frontal sinuses.

As regards the variability of frontal sinuses with age, the study of Fatu et al. (3), quoted in the letter of Latiff et al., not being a

longitudinal study, does not allow either to ascertain whether a significant increase in the frontal sinuses occurs with age, or, above all, the rate of growth. As far as we know, for identification purposes, no work has shown significant differences between the frontal sinuses of a person due to age. It would be interesting to go into further depth on this subject with a suitable longitudinal study.

We hope this will clear up any misconceptions regarding our paper.

## References

1. Chaiyasate S, Baron I, Clement P. Analysis of paranasal sinus development and anatomical variations: a CT genetic study in twins. *Clin Otolaryngol* 2007;32(2):93-7.
2. Cameriere R, Ferrante L, Molleson T, Brown B. Frontal sinus accuracy in identification as measured by false positives in kin groups. *J Forensic Sci* 2008;53(6):1280-2.
3. Fatu C, Puisoru M, Rotaru M, Truta AM. Morphometric evaluation of the frontal sinus in relation to age. *Ann Anat* 2006;188:275-80.

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