manipulation of two separate images by means of a scaled process to produce a morphed image (normal image deficient to landmarks on the deficient side). This requires further study.

Conclusions

All three methods were found to be useful in relation to mirroring the normal ear image on the deficient side of the face in patients with hemifacial microsomia. These methods were used with data from laser scanning of the face, but can also be used with data from other three-dimensional surface-scanning systems. As the differences between methods were generally of a small magnitude, even though statistically significant differences were found, they may not necessarily have significant clinical implications. Nevertheless, the use of the outer canthi was found to result in the smallest dimensional differences between the anthropometric points on the ear and the midline on the normal and deficient sides. The nature of the facial deformity will vary between different individuals, and this can result in limitations in relation to achieving a precise alignment of the ear to the facial tissues to create a harmonious esthetic result. This requires further study.

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Literature Abstract

Investigation of indoor air volatile organic compound concentration levels in dental settings and some related methodologic issues

This study investigated the levels of volatile organic compounds (VOCs) in a particular dental setting and identified methodologic problems faced in such studies. On reviewing two similar studies on VOC levels in a dental setting, the authors found that differences in sampling methods, clinical layouts, ventilation designs, and procedures performed account for differences in their outcomes. A pilot investigation was undertaken to determine the levels of indoor VOCs in an emergency ward of a dental hospital in Italy, the Ospedale Odontoiatrico George Eastman of Rome. Passive sampling of indoor and outdoor air was performed for 1 week in July, August, and September to measure concentrations of BTEX (bezene, toluene, ethylbenzene and m-o-p-xylenes), methyl methacrylate, and aldehydes. Results showed an increased mean total indoor concentration of these VOCs, which was somewhat linked to the number of dental procedures performed, thus indicating an indoor source of VOCs. Though the currently calculated concentrations cannot represent VOC concentration levels in all dental settings, this method of analysis allows for an unbiased estimate of VOC concentration. A systematic survey of involving a greater number of samples would potentially allow for correlation between the relative frequency of different dental procedures and the concentration of contaminants.

Santarsiero A, Fuselli S, Piermattei A, et al. *Ann Ist Super Sanita* 2009;45:87–98. **References:** 27. **Reprints:** Anna Santarsiero, Dipartimento di Ambiente e Connessa Prevenzione Primaria, Istituto Superiore di Sanitá, Viale Regina Elena 299, 00161, Rome, Italy. Email: anna.santarsiero@iss.it—*Teo Juin Wei, Singapore*

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