

I recently attended the inaugural WA ANZSRS/TSANZ annual scientific meeting held in Mandurah. I was thrilled to receive the inaugural WA Respiratory Science Research Award for my poster .

Fitness to Fly in Healthy Infants and Young Children

Maureen Verheggen, Jan Oostryck, Vaska Murdzoska, Andrew Martin, Stephen M Stick and Graham L. Hall
Respiratory Medicine, Princess Margaret Hospital for Children, Perth, WA 6009.

The aim of this study was to document the response of healthy infants and children to a laboratory Flight test and to evaluate the results against the current British Thoracic Society guidelines. 27 children (age range 3 – 64 months) took part in the study. 22 children completed the study with 5 children not completing the study due to unwillingness to wear the facemask. The age range of this group was 9 – 36 months. The baseline oxygen saturation (SpO₂) of those who completed the study was above 95%, and by the end of the test had fallen by a mean of 8.4% (range 2 – 26%). The magnitude of fall in saturation was significantly related to age, with younger children having greater falls than older children.

Children older than 6 months did not experience a fall in SpO₂ below 90%, whereas half the children younger than 6 months fell below 90%. These children would have failed a clinical hypoxia test under the current guidelines (British Thoracic Society 2004) however none of these children who had previously flown had any symptoms reported by parents.

In conclusion, the results of the hypoxia test, using the Princess Margaret Hospital protocol, were related to age. As half of the children under 6 months of age would have failed a clinical hypoxia test, it is questionable whether current international guidelines are appropriate in very young infants.

I would like to thank Mayo Healthcare for their sponsorship of this award.