LETTER TO THE EDITOR

Flight-related complications are infrequent in patients with hereditary haemorrhagic telangiectasia/pulmonary arteriovenous malformations, despite low oxygen saturations and anaemia

Individuals with pulmonary arteriovenous malformations (PAVMs) and hereditary haemorrhagic telangiectasia (HHT) commonly have low oxygen saturations and anaemia, two parameters generally used to indicate medical fitness to fly. Using a retrospective questionnaire-based study, the authors examined in-flight complications and predictors in 145 HHT patients (96 with PAVMs) who reported 3950 flights, totalling 18 943 flight hours. Dyspnoea and thrombotic complications were less common than expected, and could not be predicted from sea level oxygen saturations or haemoglobin concentrations. Nosebleeds that can bar individuals from boarding a flight occurred in 13.6% (11.5% to 15.8%) of long-haul flights. The findings should influence preflight advice.

Individuals with pulmonary arteriovenous malformations (PAVMs) and hereditary haemorrhagic telangiectasia (HHT) commonly have low oxygen saturations and anaemia, parameters that are used in the general population to indicate medical fitness to fly. Using a retrospective questionnaire-based study, the authors examined in-flight complications and predictors in 145 HHT patients (96 with PAVMs) who reported 3950 flights, totalling 18943 flight hours. Dyspnoea and thrombotic complications were less common than expected, and could not be predicted from sea level oxygen saturations or haemoglobin concentrations. Nosebleeds that can bar individuals from boarding a flight occurred in 13.6% (11.5% to 15.8%) of long-haul flights. The findings should influence preflight advice.

Figure 1  Sea level oxygen saturation in 96 participants who flew with pulmonary arteriovenous malformations (PAVMs). (A) Earliest and most recent arterial oxygen saturation (SaO₂) values for PAVM patients who did not report in-flight dyspnoea (improvements were the result of PAVM embolisation). (B) Mean erect oxygen saturations (SaO₂) at sea level for individuals who reported in-flight dyspnoea and those who did not. Horizontal bars denote medians. There was also no difference in earliest or latest SaO₂ (data not shown). (C) Serial SaO₂ in participants who reported dyspnoea over periods of 1–17 years (median 7.5). Circles indicate periods in which flights were reported to cause dyspnoea. The flight causing dyspnoea for participant 107 was the only long-haul flight taken by that individual.

Acknowledgements The authors thank Dr Andrew Comm, Dr Robina Coker and Professor JMB Hughes for manuscript review and helpful comments.

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Both authors had full access to all of the data in the study, and take responsibility for the integrity of the data and the accuracy of the data analysis.

Funding This work was performed as part of an NIHR Academic F2 post (CGM). OLS is also grateful for support from the Imperial NIHR Biomedical Research Centre Funding Scheme. The funders had no part in the study design; in the collection, analysis and interpretation of data; in the writing of the report; or in the decision to submit the article for publication.

Competing interests None.

Ethics approval Ethical approval was obtained from the London-Surrey Borders Research Ethics Committee (NRES 10/H0808/8).
Contributors Both authors designed the study and obtained ethical approval. CLS had reviewed the patients. Questionnaires were sent out and responses tabulated by CGM. Both authors obtained further data from primary patient records and analysed the data. The authors co-wrote the manuscript: the table was generated by CGM; figures and statistics by CLS. Both authors approved the final version. CLS is the guarantor of the data.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement The authors are fully committed to the principles of data sharing.

Accepted 5 September 2011

Thorax 2011; :1—2.
doi:10.1136/thoraxjnl-2011-201027

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Thorax published online September 26, 2011

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