It is vital that efforts to establish the verification protocol and enhance the effectiveness of the BTWC should continue.

Reference

1 Ashraf H. US biological defence research under the spotlight. *Lancet* 2001;**358**: 895.

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Clinical aviation medicine: safe travel by air

Editor – I read Raymond Johnston's forum on clinical aviation medicine (*Clin Med JRCPL* September/October 2001 p385–8). The medical community certainly needs to increase its knowledge in this area. Johnston's review of physiology and specific medical conditions omits congenital aspects of the heart and the lungs, and individuals with cyanotic congenital heart disease, especially those with pulmonary hypertension and polycythaemia, in this group of patients. Minor changes in oxygen tension raise pulmonary artery pressure, this increases right to left shunt and eventually leads to systemic desaturation and metabolic acidosis. Nor should the biophysical effects of acceleration and deceleration be neglected.

A stretcher patient in prone or supine position, whose head is toward the front of the aircraft can undergo significant venous pooling and decrease in cardiac output on take off. With the exception of cerebral oedema patients, the head should be positioned toward the rear of the aircraft. This is particularly important for patients with low cardiac output and left ventricular outflow tract obstructions. Last but not least are patients with congenital cyst of the lung. Obligatory gas expansion according to Boyle's law can compromise pulmonary-cardiac status on board. Careful speculation is needed before we sign the aircraft form for our patients who give us full trust.

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Autoimmune haematological disorders

Editor – For the sake of completeness, Dr Provan's excellent review of autoimmune haematological disorders (*Clin Med JRCPL* November/December 2001, pp447–51) ought also to make mention of acquired haemophilia, with a reported incidence of 1 in 100,000, in which the aetiopathogenic mechanism is the acquisition of antibodies to factor VIII[1]. This disorder can occur in isolation, especially in elderly women, but also in association with autoimmune disease, malignancy, pregnancy, or drugs[2]. Also, von Willebrand's disease is yet another bleeding disorder in which examples can be found of immune-mediated aetiopathogenesis. Such cases are characterised by the presence of G class immunoglobins directed against the factor VIII-von Willebrand factor complex[3].

References

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2 Anonymous. Acquired haemophilia (editorial). *Lancet* 1981;**1**:255.
3 Alhumood SA, Devine DV, Lawson L, Nantel SH, Carter CJ. Idiopathic immune-mediated acquired von Willebrand's disease in a patient with angiodysplasia: demonstration of an unusual inhibitor causing a functional defect and rapid clearance of von Willebrand factor. *American Journal of Haematology* 1999; **60**:151–7.

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