

Medical Risks Associated With Air Travel

Editorial, by Jon L. Jordan, MD, JD

Historically, the responsibilities of the Office of Aerospace Medicine have been limited largely to matters related to safety of flight. As a result, our efforts have been concentrated on assuring the medical fitness and safe operational performance of flight crewmembers and air traffic controllers.

While in-flight health issues affecting passengers and crew in air transportation have received attention, these issues have not been accorded the same level of importance. However it is clear that, while safety of flight will remain paramount, in-flight health issues will command greater emphasis in the future. This is exemplified by the current involvement of the Office of Aerospace Medicine in a number of matters that, not so long ago, might have been considered outside the scope of our legislated authority.

As examples, we have experienced greater involvement in such issues as dissemination of communicable disease on board air carrier aircraft, alleged health risks associated with recirculated cabin air, exposure to cosmic radiation, and the provision of emergency medical assistance on board air carrier aircraft. In respect to the latter, readers may recall that the FAA issued a Notice of Proposed Rulemaking on May 24, 2000, that would require air carrier aircraft to be equipped with automated external defibrillators and enhanced medical kits. Comments received to this proposal have been reviewed, and the FAA will shortly be issuing a decision.

Although not yet considered an FAA problem, concern is being raised in medical circles and by passengers about the impact on passenger health of crowded air carrier cabin conditions on long flights. So-called "air rage" is a growing problem that, if nothing else, presents a physical safety concern for passengers. While it is likely that the phenomenon is related to multiple factors, cramped cabin conditions may play a role.

Causing concern most recently is the identification of cramped cabin conditions and long flights as possible causes or contributing factors to the development in passengers of deep vein thrombosis (DVT). Risk for the development of DVT is not unique to air travel. In several recently reported incidents, however, passengers on aircraft have sustained pulmonary infarcts and death from emboli linked to venous thrombosis. While the incidence of such events is unknown, the number of reported cases is increasing. In some instances, litigation is underway charging air carriers with negligence in failing to warn passengers about the dangers of prolonged inactivity and the possible development of DVT.

I think it's only a matter of time before the aviation medical community and the air carriers

themselves will be called upon to significantly increase their activity in dealing directly with medical issues associated with air travel and to direct educational efforts on the flying public. Not only is there a need to educate patients about conditions that could adversely affect their own health, they must be educated on how their conditions could affect others. Virtually every day air carrier aircraft are diverted because of an ill passenger on board. While the need for many of these diversions could not be anticipated, all too often persons with known medical conditions board aircraft when they shouldn't, thereby placing themselves and others at significant inconvenience or risk to their health.

Some may think that regulation is an answer to the problem. I believe, however, that while regulation may sometimes be necessary, education is the key. In this respect, aviation medical examiners can play a vital aviation safety role not only in assessing the medical qualifications of airmen but also in educating patients about issues associated with air travel. It's in everyone's best interests.

JLJ