MEDICINE

CORRESPONDENCE

In-Flight Medical Emergencies
by Prof. Dr. med. Jürgen Graf, Prof. Dr. med. Uwe Stüben, Dr. med. Stefan Pump in volume 37/2012

Declaration of Assumption of Liability for all Airlines

The authors rightly name this issue as an obstacle for a doctor intending to provide medical assistance on board an airplane. It is therefore to be welcomed that assisting doctors often, and according to the literature, by default when flying on board a US aircraft, are protected against claims owing to declarations of liability. This does not seem to be standard practice for Lufthansa’s intercontinental flights, but for doctors on board it would certainly be a relief when meeting their ethical and legal obligation to provide medical assistance in emergencies.

REFERENCES

Prof. Dr. med. Ulrich Schmitz-Huebner
Herford
schmi-hue@web.de

Conflict of interest statement
The author declares that no conflict of interest exists.

Similar Data Collected

We are pleased to bring to your readers’ attention our recently collected data, which were made available by the participating airlines. On the basis of 10 189 medical emergencies on board commercial aircrafts we were able to describe a similar distribution pattern as the authors described in their article (1). Our study also showed that in more than 80% of cases, a doctor or other medical professional was present. While we conducted a thorough international analysis of the different forms of documentation of medical emergencies on board commercial airplanes we did not find any register that documented emergencies across airlines. On the basis of data from 10 international airlines we found that the current ways of documenting medical emergencies differ widely. Surprisingly, none of the airlines met the sample requirements of the International Air Transport Association (IATA), published as “Sample Medical Incident Report” (2). Even though Lufthansa with its emergency medical equipment clearly exceeds the legal requirements, as was shown in the article, we were able to show that this seems to be a welcome ex-
ception to the rule. In a study of the emergency medical equipment of 12 European airlines, none met the requirements of the International Civil Aviation Organization (ICAO) (3). Two of the airlines were so scantily equipped that adequate emergency medical assistance would not have been possible on board. Improved standardization of the emergency medical equipment and of the documentation of medical emergencies on commercial airplanes therefore seems indicated.

REFERENCES

Dr. med. Michael Sand
PD Dr. med. Falk G. Bechara
Klinik für Dermatologie, Venerologie und Allergologie,
Ruhr-Universität Bochum
michael.sand@ruhr-uni-bochum.de

Daniel Sand, M.D.
Department of Medicine, University of California, Los Angeles (UCLA)

Conflict of interest statement
The authors declare that no conflict of interest exists.

Risk of VTE Is Small but Exists

“A general recommendation for anti-thrombotic stockings or anticoagulants appears unjustified, because VTE has not been observed in any passengers without risk factors, even when they flew for longer than 8 hours.”

This statement cannot be allowed to stand as it is because the risk of developing a thrombosis as a result of sitting down for many hours is usually small, but that doesn’t mean it doesn’t exist.

A famous victim was a former US president, Richard Nixon, who developed a pulmonary embolism after an in-flight venous thromboembolism (VTE) in 1974. Such a clot may not even break free immediately after the flight has landed; rather, there is every chance that the fatal results will occur only when a passenger has long disembarked the aircraft (the so-called VTE of the first day of a holiday). In this setting, it is obviously difficult to actually prove an association between cramped seating conditions on board the plane and the VTE.

At Heathrow airport in London, some 18% of deaths after a long-haul flight are due to pulmonary embolism. A study at Tokyo’s airport states that 100–150 air
passengers, out of a total of 20 million every year, have sought treatment for blood clots. In the past 8 years, 25 persons have died from VTE after a long-haul flight. Other studies have found that 7–8% of complications were caused by in-flight VTE.

A retrospective study from the World Health Organization’s Research into Global Hazards of Travel and other publications (2) have shown that the incidence of deep vein thrombosis in the lower limb is 1/1000 and is strongly age-dependent (3–5/1000 in those older than 60). In persons with an existing predisposition, the possibility of thromboembolism should never be ruled out.

According to the Bonn Vein Study, one in five women and one in six men has a pre-existing defect. Only one in 10 people has completely healthy veins.

In Reply:
We thank Dr Grotewohl for pointing out the multitude of study data regarding the topic of travel-associated thrombosis and possible thromboembolic complications (VTE). The controversies regarding “air-travel associated thrombosis” or economy class syndrome follow us because the design of past studies did not allow us to draw any conclusions regarding causality. Undisputed risk factors include the association of the duration of immobilization with the development of VTE, as well as possibly additional, individual, predisposing factors (1). It is not known whether, immobilization remaining equal, the mild hypoxia during the flight constitutes an additional risk factor compared with traveling by car, bus, train, or ship (2). For this reason we pointed out in our article the need for individual, patient centered medicine while considering the general recommendations (3).

Drs Sand think that the medical equipment on board is inadequate and also point out the lacking standardization in the documentation of medical emergencies. In the context of the medical equipment on board commercial aircraft, the recommendations from the ICAO (International Civil Aviation Organization) are obviously being confused with legal regulations. Owing to regular audit in all operative areas of aviation it can be assumed—at least in industrialized nations—that the valid legal standards with regard to medical equipment on board are adhered to (3). Whether these legal requirements are sufficient from a medical perspective is a whole other discussion.

The conclusion by Sand et al., that medical incidents on board are insufficiently documented, is based on data from 10 of the 1300 airlines in the study (4). Airlines that are present in the Medical Advisory Group of the IATA (International Air Transport Association) did not participate in this survey, although they represent more than 20% of global commercial air traffic. The IATA conducts a registry of medical emergencies based on standardized data from the airlines; this is updated annually. Currently, 26 airlines are participating in this registry. The results reported by Sand et al. (4) can therefore not be regarded as representative of the industry standard.

Professor Schmitz-Huebner reminds us of the medicolegal worries of traveling doctors regarding in-flight medical emergencies. As far as we are aware the declaration of assumption of liability on the airline’s part, as mentioned, is standard for the large European and extra-European airlines. If the form is not handed out by the cabin crew without prompting, please ask (in Lufthansa’s case, the form is on the back of the emergency protocol, in four languages).

REFERENCES

Conflict of interest statement
The authors are employees of Deutsche Lufthansa.