

CLINICAL "SNIPPETS"

AED use in a passenger during a long-haul flight: repeated defibrillation with a successful outcome.

Harve H, Hämäläinen O, Kurola J, Silfvast T.
Hyvinkää Hospital, Department of Anesthesia and Intensive Care, Hyvinkää, Finland.

Space Environ Med. 2009 Apr;80(4):405-8.

Overview: Sudden cardiac arrest is one of the leading causes of death, and early defibrillation of ventricular fibrillation (VF) is the single most important intervention for improving survival. The automated external defibrillator (AED) and the concept of public access defibrillation provide a solution to shorten defibrillation delays. Commercial aircraft create a unique environment for the use of the AED since an emergency medical service system (EMS) response is not available. We review published studies on this subject and describe the case of a passenger who developed VF during an intercontinental flight and was successfully resuscitated despite recurrent episodes of VF.

Overview: There are three large studies reporting placing AEDs on commercial aircraft. No harm for co-passengers or malfunctions were reported. Survival rates have been higher than those obtained by well-performing EMS. According to previous studies, placing AEDs on commercial aircraft is also cost effective. The absence of a suitable diversion destination should not influence the rescuers' decision to attempt CPR on board.