FLIGHT DIVERSSIONS FOR NON-SHOCKABLE CARDIAC ARREST CASES. ARE THEY JUSTIFIABLE?

DÉROUTEMENTS DE VOL POUR LES CAS D’ARRÊT CARDIAQUE NON-CHOQUABLES. SONT-ILS JUSTIFIABLES?

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Introduction: Medical diversions impose a complex risk/benefit analysis. They are potentially life-saving although they almost always represent cost, operational disruption, and safety concern for the airline. If the anticipated benefit from a diversion is nil or very small, the risks associated might not be justifiable, from the affected passenger and airline standpoints. The purpose of this study is to review the prognosis of non-shockable cases of IFCA (NSIFCA) and discuss the need to adapt TOR criteria to the in-flight environment.

Methods: The 10-year experience with IFCA’s as handled by MedAire was reviewed. End goals of survival-to-hospital and survival-to-hospital-discharge were correlated with other variables. A literature research was performed focusing on review and meta-analysis articles on prognostic data of survival in OHCA and comparing those to published data on IFCA.

Results: 394 consecutive cases of IFCA were available for analysis. In 297 cases no shock was advised by the AED. 7 (2.6%) cases survived to hospital. There was a positive, non-statistically significant association between diversions and survival to hospital with 5/101 (4.95%) survivors from diverted flights versus 2/196 for non-diverted ones (OR=5.05 95% CI= 0.96

Conclusion: Risks associated with a diversion may outweigh the potential benefit in cases of SIFCAs. Those risks include the rescuer’s safety in case CPR needs to be continued during landing. The authors propose the following in-flight specific TOR guidelines adapted from accepted criteria for other OHCA scenarios to stop resuscitation and eliminate diversion: collapse not witnessed by flight attendants or other passengers, no shock advised during resuscitation, and no return of spontaneous circulation within 30 minutes.