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## **PULMONARY CONCERNS DURING AIR EVACUATION IN THE THAI CAVE RESCUE OPERATION**

*PROBLÈMES PULMONAIRES PENDANT L'ÉVACUATION DE L'AIR DANS L'OPÉRATION DE SAUVETAGE EN GROTTES THAÏLANDAISE*

**T Lumjoun**

*Pulmonary Medicine, Fort Khunchueangthammikkarat Hospital, Phayao, Thailand  
[coccusguy@hotmail.com](mailto:coccusguy@hotmail.com)*

**Introduction:** In the world renowned Thai cave rescue during 23 June-10 July 2018, in Chiang Rai province, Thailand, victims were rescued from a flooded cave by diving them out. This would have affected their pulmonary physiology.

**Background:** After having been treated and stabilized in the field hospital, the young footballers and their coach had to be transferred to a tertiary care medical facility (Chiangrai Prachanukroh Hospital). Twelve of them were transferred by air, and one by ground due to unfavorable weather condition. Air evacuation was able to shorten transportation time from 1 hour to 25 minutes.

Two types of aircraft participated in this mission: the MI-17 (provided by the Royal Thai Army), and the Bell 429 (provided by the Royal Thai Police Force). Both were equipped with intensive monitoring and advanced cardiac life support systems. Each MI-17 flight contained two patients, accompanied by medical escort consisting of 2 doctors, 2 registered nurses, and 2 practical nurses and another staff.

During enroute care, recurrent hypothermia was encountered in some cases; hypoglycaemia was also detected and treated during the flight. Fortunately, there were no serious adverse pulmonary events nor hemodynamic instability throughout the flights.

Upon arrival at the referral hospital, most cases were partially awakened. At this stage, the major concern was still hypothermia, despite having been rewarmed with normal procedures, to keep the target body temperature of 35 degree Celsius, which is optimally required to be maintained.

**Summary:** Transportation of the young footballers and their coach to the tertiary medical care facility was successfully accomplished with careful medical monitoring and supervision.