

Asthma and SCUBA Diving

Tai, Yao-Chung¹ Li, Zhong-Ying¹ Lin, Jao-Chuan¹ Huang, Qiong-Yao²

¹ National Kaohsiung Marine University

² Chung Hwa University of Medical Technology

Abstract

SCUBA (self-contained underwater breathing apparatus) diving is very popular activity in Taiwan; nearly 3% asthmatics participate in this area. The purpose of this paper was to review the relationship between asthma and SCUBA diving, collected all of asthma and diving papers to realize how asthmatics fit to SCUBA diving or not. The conclusion is cold air, polluted compress air, cold and salt water and anti current exercise may provoke asthma, increased the risk of SCUBA diving. Career divers decreased the lung capacity and narrowed the airway, it will limit the air expend from lung when ascend then cause air embolisms. Observing the pulmonary function before and after bronchial provocation testing combine the diving environment factors is the further way to find out the trigger timing of asthma before SCUBA diving. So we recommend that asthmatics should take the health examination included asthma history, pulmonary function, PEFV and chest radiograph before SCUBA diving to evaluate the feasible.

Key words: asthma, SCUBA diving, pulmonary function