

PP97 DECOMPRESSION SICKNESS IN MIRI WATERS

RANJINI PUSHPARAJA¹, MUHAIMIN
AZWAN¹

¹HOSPITAL MIRI, SARAWAK, MALAYSIA

INTRODUCTION

Decompression Sickness (DCS) is seen in the settings of diving, aviation, and space exploration. It is rare amongst recreational divers and commonly seen during the ascent phase.

CASE

A 33-year-old male was transported to the hospital after experiencing shortness of breath and loss of consciousness during his ascent after a 20-meter dive. He had been diving for 20 minutes with normal compressed air. After surfacing, he appeared to be confused, was coughing, and complaining of a headache. He was transferred to the hospital from the nearest health clinic with a non-rebreather mask. He denied any blurring of vision, tinnitus, body weakness or arthralgia. Examination revealed crepitations on the lower zone of his right lung, whereas other systems were unremarkable. His chest radiograph showed haziness of lower zones of bilateral lungs. Other initial investigations were normal. He was put in a supine position, given intravenous fluids and the non-rebreather mask were continued. The next day, he was transferred to Sepanggar Armed Forces Hospital from the ICU via fixed-wing aircraft, flying at 1500 feet above sea level to receive hyperbaric oxygen therapy.

DISCUSSION

Decompression sickness is caused by the inflammatory and obstructive effects of

inert gas bubbles in tissues and the vascular system. Type I is 'pain only' whereas in type II or 'serious' DCS, as in this case, pulmonary ('chokes'), cardiovascular, neurological, and vestibular ('staggers') signs and symptoms can manifest. As the nearest hyperbaric oxygen therapy is in Sepanggar, mode of transportation was also an issue, in addition to having to cross the borders of Brunei. Opting for air transport invited questions on the safest altitude and cabin pressure without worsening the patient's condition. Limited literature suggests that cabin altitude to not surpass 500 feet. However, this could vary based on time of flight and weather condition as the pilot's discretion is independent of medical decision-making.

CONCLUSION

DCS can be difficult to diagnose due to the myriad of symptoms and getting access to prompt treatment is also a challenge. Hence, timely diagnosis and proper plan of treatment are vital, or the result could be catastrophic