

QUESTION:

A recent article, “Tauchen nach Covid-19-Erkrankung?” concludes that divers who have had COVID-19 will be permanently unfit to dive. Is this opinion shared by diving medical professionals? What is the evidence?

ANSWER:

At the present time, we simply do not have sufficient data to support or refute the definitive proclamations made by this case series. Any attempt to generalize the effects of COVID-19 based upon a single case series (6-cases) published in the lay-press^{1,2}, should be met with appropriate scrutiny.

Covid-19 symptoms range from mild to severe. Some people have no symptoms at all while others require complicated stays in an intensive care setting and require ventilatory support. The recent report published in the lay-press^{1,2} has resulted in considerable concern related to the finding of pulmonary inflammation in mild cases of COVID-19. This case series reports findings that may provide some insight into post-infection recovery, with a potential knock-on effect on fitness to dive evaluations, and recommendations related to medical follow up studies, and convalescence period prior to a return to diving. However, we must interpret this small case series (6-cases) with caution, as there is not enough known about the natural history of this disease to confidently extrapolate prognostic guidance from this one report, nor generalize these findings to every case of COVID-19. Likewise, calls for a particular medical examination or screening test(s) following infection to determine fitness to dive, based on this work alone, are currently unsubstantiated and premature.

The list of potential variables related to how this disease manifests, its clinical course, and long-term prognosis is lengthy and may include factors such as underlying medical conditions, age, disease severity, and secondary complications. Case reports suffer from multiple design weaknesses to include a lack of controls and randomization, which makes any conclusions that we may want to generalize to a larger population suspect. While these findings are indeed disquieting, it will take time before the potential impact on individual health, and any lasting effects on lung or heart function, are captured in the peer-reviewed literature.

COVID-19 shares many of the same features as other serious viral pneumonias that require a period of convalesce before returning to full activities – a process that can take weeks or months depending on symptom severity. The long-term effects of COVID-19 on pulmonary function and recovery time will vary, and there is insufficient experience and sound clinical research to make accurate prognostic determinations.

As the diving medical community gains more experience, and has the opportunity to study this illness and follow patients through their recovery, we will develop a thoughtful approach to making fitness to dive determinations. A single small case series is insufficiently powered to support definitive statements related to permanent lung function changes or air trapping risk – but these are unquestionably areas of keen interest within the diving medical community and will be closely monitored.

Over the next several months, the global medical community will gain a better understanding of the natural history of this disease. In addition, multiple studies are underway looking at treatment modalities and how we may reduce morbidity and mortality. COVID-19 has gripped the world and there is no other time in our history where we have as many people searching for answers about a single disease. We will continue to track research on this topic and update this position as new information becomes available.

1. Hartig, Frank. Tauchen nach Covid-19-Erkrankung? Wetnotes. April 15, 2020. <https://www.wetnotes.eu/tauchen-nach-covid-19-erkrankung/>
2. (Translation of reference 1). Bandera County Courier. Medic sees evidence of serious long-term lung damage. April 18, 2020. <https://www.bccourier.com/medic-sees-evidence-of-serious-long-term-lung-damage/>
3. Hughes, Russel. COVID-19 potential impact on divers. Advanced Diving NZ. April 21, 2020. <https://www.advanceddivingnz.com/advanced-diving-blog/2020/4/21/covid-19-potential-impact-on-divers?fbclid=IwAR2bhP-kXvUYCKNQu8a-tpzIMQf6YKX2m1AIPiYYZadEYrWGZKu0sroTCEk>