Wind, waves and weekend warriors: The heart of the matter

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In every person’s life, there are certain events of such impact that afterward, reminiscences are in the context of things having happened before or after the event. For me, one of those events occurred 10 years ago. I am, by profession, a pediatric cardiac anesthesiologist: That is, I evaluate, prescribe, manage and administer anesthesia to infants and children undergoing surgery for the repair of congenital heart defects and associated conditions. As one might expect, this is a high-risk and stressful endeavor that some have described as akin to carrier operations in naval aviation. This medical practice, more than many others, requires the close coordination of a team of individuals, none more intimate than the surgeon and anesthesiologist.

To some degree, every congenital heart surgery is unique as, despite the best imaging technology, some unexpected anatomical variation is frequently encountered at the time of surgery. At that moment, the surgeon is challenged to design an appropriate repair, in collaboration with the anesthesiologist’s management of complex and rare physiology. Given the nature of this practice and the time spent, extremely close relationships develop, not unlike those of soldiers in combat. Such was my relationship with one of the nation’s most talented pediatric cardiac surgeons. So, 10 years ago, when I received the phone call telling me that my friend and colleague had died while scuba diving, I knew that thereafter I would mark time in terms of before and after the phone call. On a clear, calm day in the Florida Keys, my friend, an experienced diver, went missing in 15 feet of water and was later found nearby, with full tanks and normally functioning gear. Ultimately, a cardiac arrhythmia was thought to be to blame.

In this issue, we bring you several papers discussing the medical risks of diving, particularly involving the cardiovascular system (Pages 257-296) [1-5]. These papers serve to highlight that diving can be a physiologically stressful endeavor, made more so by the extraphysiologic conditions of increased pressure at depth and the unusual behavior of inhaled gases while at depth, as well as during ascent and return to the surface. It is not surprising, therefore, that there are injuries and fatalities associated with recreational diving: It is surprising that the incidence of these tragedies is not considerably higher. Even assuming that some fatal incidents do not find their way into the DAN database, the safety record for recreational diving is remarkable. This is particularly true when one considers that a large segment of our diving population is becoming older, bringing with it an increasing number of coexisting medical issues. One speculation regarding this remarkable record is that much of the diving done by “weekend warriors” in relatively shallow water, under less stressful conditions; but this remains just speculation.

Although recreational diving will never be without risk, it is not unreasonable to expect that the current level of safety can be improved. Thus, we face a moral imperative compelling diving and medical professionals, as well as the individual divers they serve, to cooperate in attempts to mitigate diving’s residual risks. By actively promoting age- and activity-appropriate medical screening, quality diving instruction and diving activity-specific certification, on both an initial and periodically recurrent refresher basis, we stand to improve the odds that these actions will successfully interplay with the underwater environment to prevent future tragedies similar to what happened with my friend 10 years ago.

REFERENCES