

Letters to the editor

Diving medical education

Dear Editor,

Congratulations to Carl Edmonds for his 'Opinion' on diving medical courses in your September issue.¹ This timely and important review is written in his characteristically restrained manner. However, he was a bit hard on "Mickey Mouse courses" that thrive by providing continuing medical education seminars in exotic diving locations. These rarely have specific training objectives but they have introduced this subject to many hospital and family doctors. Someone once said that this was how SPUMS began, but maybe you should check that allegation with the Founder?

As in your associated Editorial, the focus is on the training needed to provide competent medical support for recreational and naval divers but, alas, there was little on the deeper needs of working divers in the offshore oil and gas industry. While some diving doctors in every region are needed to become proficient in this, there is a worldwide problem in that most diving medicine courses follow the basic shallower need and have neither the time nor the budget to teach more.

The European development, created jointly by the European College of Hyperbaric Medicine (ECHM) and the European Diving Technology Committee (EDTC) over the last 10 years, recognises the different needs for training in the distinct clinical areas of hyperbaric and diving medicine. In a nutshell, each specialty has a shared Level I for the Medical Examiners of divers and hyperbaric personnel and, at Level II, moves on to the aspects of diagnosis and recompression common to both groups.

The ECHM is a medical committee that defines the lengthy career training needed for accreditation as a clinical HBO specialist (Levels II, III). This includes the medical management of air and deep recreational divers, particularly those needing treatment in a hospital chamber. These courses are audited by the European College of Baromedicine, University of Malta.

In contrast, the EDTC (a multinational tripartite body of government, employer and trades union representatives, and augmented with doctors) has a medical committee (EDTCmed) that defines the training needed for those who provide medical support for working divers. The appointment of Medical Examiners is largely controlled by individual governments but the content of Level I provides the foundation for all diving doctors.

Beyond Level I there is no viable full-time career in diving medicine and so EDTC defined the training needed by those who are already accredited specialists in a relevant clinical field. For them, Level II is supplementary training and,

because decompression is only one of the problems to be met, this training must also include the practical aspects of applied diving physiology and accident management at sea and also provide an emphasis on deep saturation diving. These courses are audited by the Diving Medical Advisory Committee DMAC-EDTCmed (<http://www.dmac-diving.org/guidance/DMAC29.pdf>) and are recognised as an appropriate basis for training worldwide by the international offshore diving industry (IMCA, the International Marine Contractors Association). For those candidates who are not accredited specialists in occupational medicine, evidence is also required of some appropriate training in that field.

For some years these courses have been approved by DMAC-EDTCmed for Level I (e.g., UHMS) and II status (e.g., University of Stellenbosch) outside the EU but a problem around the world is the gap that exists between, for example, the specific training of some navies and the different needs of commercial diving. At present EDTCmed, DMAC and IMCA are reviewing the need around the world for a regional 'top-up' course to give experienced naval and recreational diving doctors the additional components of EDTC Level II needed to cover commercial diving, but it will be some months before these are implemented.

David Elliott

E-mail: <Davidelliott001@aol.com>

Professor Elliott is a Life Member of SPUMS.

Key words

Underwater medicine, training, qualifications, occupational diving, letters (to the Editor)

Recognition of diving medicals in Queensland

Dear Editor,

Recreational divers from various European countries dream of diving the Great Barrier Reef (GBR) once in their lifetime. However, again and again we receive complaints that the fitness-to-dive certifications the divers bring with them from Europe are not considered valid for diving the GBR, and that divers have to go to a local doctor to do the same examination again. In most European countries, divers undergo a diving medical review every year or every few years. Many of these are now conducted by diving and hyperbaric physicians who have met the training standards of the ECHM/EDTC consensus statement (1999).¹ This standard has been described previously in this journal.²

We are aware that the Queensland state regulations oblige all tourists to have a medical by a locally accredited diving medicine physician. In Australia, you have achieved a reasonable solution, in that medical examiners of divers (MEDs) whose names appear on the SPUMS Diving Doctors

List (DDL, <www.spums.org.au>) are 'accredited', and the medicals coming from these doctors are accepted in Queensland.

We recognise that there must be some sort of guarantee that a diving medical certification is not signed by a doctor with insufficient competence, but we believe that this problem for European divers could be reasonably solved by recognition of our European training standards for diving physicians. To believe that all non-Australian diving medical examiners are not competent is clearly discriminatory.

After discussion with some SPUMS colleagues, including the President, we think that a list of European MEDs trained to the standards of EDTC/ECHM could be inserted alongside the SPUMS DDL. With comment from your side that you consider the training of these doctors and the assessment standards of the EDTC appropriate for recreational divers' medical certifications, you would probably help to stop the current unjustified and discriminatory practice of the Queensland authorities.

We believe frank discussion and future cooperation would be of interest and value to both SPUMS and the European Underwater and Baromedical Society. It is noteworthy that the UK Health and Safety Executive (HSE) has ceased accrediting MEDs, and the International Marine Contractors Association now relies on the EDTC standards for off-shore divers' medical support worldwide. Our standards have been presented on two occasions at SPUMS ASMs and they are published on the EDTC website.¹

Dr Jürg Wendling
 Chairperson, Medical Subcommittee,
 European Diving Technology Committee (EDTCmed)
 Fbg. du Lac 67, CH - 2502 Bienne, Switzerland

References

- 1 Training standards for diving and hyperbaric medicine. Prepared by the Joint Medical Subcommittee of ECHM and EDTC; 1999 <www.edtc.org>.
- 2 Wendling J, Müller PHJ. Standards for diving in Europe – the present situation. *SPUMS J.* 2004; 34: 141-4.

Key words

Medicals – diving, training, qualifications, fitness to dive, recreational divers, legal and insurance, policy, tourism, letters (to the Editor)

Book reviews

PFO and the diver

Patency of the cardiac foramen ovale: a risk factor for dysbaric disorders?

Constantino Balestra, Frans J Cronjé, Peter Germonpré and Alessandro Marroni

Hard cover, 160 pages

ISBN 978-1-930536-39-5

Flagstaff, AZ: Best Publishing Company; 2007

Price: US\$79.00 + P&P

Copies can be ordered online from <www.bestpub.com.> or from Best Publishing Company, P O Box 30100, Flagstaff, AZ 86003-0100, USA

Phone: +1-928-527-1055

Fax: +1-928-526-0370

E-mail: <divebooks@bestpub.com>

This is a highly specific review of a relatively controversial topic in diving medicine by a research group that has published extensively in this area previously. Naturally its focus is largely on the group's own studies. Amongst other issues, it attempts to address the risk of patent foramen ovale (PFO) in divers and whether there is a significant correlation with MRI abnormalities previously reported in the literature or abnormalities in neuropsychometric testing results.

It does not purport to be a reference text on the pathophysiology of decompression illness and limits its discussion largely to those aspects of decompression illness where paradoxical embolisation of bubbles across a patent PFO may be relevant. Other clinically related conditions where PFO is not relevant, e.g., pulmonary barotrauma and arterial gas embolisation, are not addressed.

It is a hardcover monograph printed on glossy paper with an extensive reference section. The quality of the numerous figures and illustrations is excellent. Disappointingly there are a few obvious typographical errors.

The text is divided into three main sections. The first section (chapters 1 and 2) provides an introduction to dysbaric disorders and a brief discourse of the risks of scuba diving relative to other sporting activities. In the second section, chapter 3 reviews the embryology of the heart and the development of the foetal circulation. The subsequent chapters (4–12) detail the investigations and methodology used by the authors in PFO detection, relating the presence of PFO to decompression illness (DCI), changes in the size and even the presence of PFO over time, intracranial MRI abnormalities and neuropsychometric testing abnormalities in divers and fractal analysis of MRI abnormalities.