

## LETTERS TO EDITOR

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Hyperbaric Medicine Unit  
Dept. Anaesthesia and Intensive Care Royal  
Adelaide Hospital  
North Terrace  
ADELAIDE SA 5000

5th May 1987

Sir

I would be grateful if you would bring to the attention of your members the availability of positions on the Underwater and Hyperbaric Medicine Courses that will be conducted by this Hospital in September 1987.

Royal Adelaide Hospital offers these courses because these subjects are not included in most undergraduate medical curricula. Also, there has been a dramatic increase in Australians and New Zealanders taking up recreational diving, and consequently an increase in diving accidents of all types. Similarly, the frequency of those life threatening medical conditions for which hyperbaric therapy is the definitive treatment such as carbon monoxide intoxication, have increased significantly.

The course details are:

#### 1. **Basic Course in Underwater Medicine: 14-18 September 1987**

##### **Aim:**

To enable medical practitioners to determine the fitness of candidates for diving.

To introduce medical practitioners to the types of diving accidents.

**Duration:** 5 days

##### **Course:**

Lectures, evolving clinical problems practical work.

**Location:** Hyperbaric Medicine Unit, Royal Adelaide Hospital.

**Cost:** \$250

#### 2. **Advanced Course in Underwater and Hyperbaric Medicine: 21-25 September 1987**

##### **Aim:**

To enable medical practitioners to recognise and initiate treatment for diving accidents, and those medical conditions for which hyperbaric therapy is life-saving.

**Duration:** 5 days

##### **Course:**

Lectures, evolving medical problems practical work.

**Location:** Hyperbaric Medicine Unit, Royal Adelaide Hospital.

**Cost:** \$250.

The courses are conducted six-monthly.

Anyone interested in these courses should write to me directly, and I will forward further information.

Yours sincerely  
DF Gorman BSc MB CHB FACOM  
Director, Hyperbaric Medicine Unit

Phone (08) 224-5116

School of Applied Science  
Gippsland Institute of Advanced Education  
Switchback Road  
CHURCHILL VIC

6 May 1987

Sir

The Provisional Report on Australian Diving Related Fatalities (*SPUMS Journal* Vol 17, 1987) again makes fascinating if somewhat depressing reading for a long-time diving instructor and hopefully newer instructors alike. I feel compelled to comment on one aspect in particular.

The buddy system appears to have been reduced to a status of little importance in both Dr Walker's discussion of the fatalities and in the behaviour of divers and dive-leader/instructor referred to in these analyses. While not claiming that adherence to a rigid buddy system would have saved the lives involved, I feel certain that it would have significantly reduced the overall probability of the fatal outcome. Lip-service to the buddy system or the often joked about "two divers in the same ocean" is not enough. The buddy system consists of two divers, and only two divers, allocated before the dive and remaining together for the duration of the dive. It does not cover three divers, or, of more concern in these analyses of 1985 fatalities, the loose allocation of buddies with the understanding that, "... as soon as anyone's gauge showed 50 mPa they and whoever had next lowest remaining air would be ordered to ascent, the buddy groups being reallocated" (SC 85/6). It does not include sending divers back to the surface alone or the descent of one buddy alone whilst the other buddy "had no reason to watch his descent as he was then completing his own preparations to follow" (SC 85/9).

These situations all mean that there is no true dedication to a single buddy since pairing may vary during the dive or indeed that there may be periods of diving without a buddy at all. The price is obvious.

The dependence on a divemaster/instructor only exacerbates the situation since the dependent divers rely on the divemaster/instructor's decisions underwater and less on their own judgement and their own buddy system. This is necessary during training but requires rapid weaning toward the end of the course. If the students are not fully competent they should not be certified. Competency includes training in the buddy system; not as a member of a loose group with ill defined responsibilities. Although open to interpretation the buddy system involves at least the following components:

- \* A joint decision as to the suitability of diving in the prevailing conditions (includes mental and physical status of the divers).
- \* A joint decision on dive plan.
- \* Assistance in gearing up.
- \* Complete buddy check of all items of equipment

- Tank fully on
- Tank full
- Regulator function
- Belts, amount of weight, quick releases
- Mask
- BC function and use (including check for leaks)

- \* Joint descent
- \* Constant monitoring of buddy during the dive (air consumption behaviour)
- \* Actively avoiding separation.

A further factor relevant to the fatalities in question is the need to plan a sensible air cut off point; making due allowance for depth, 'the red zone' is not always sufficient air in reserve. There is no excuse for running out of air underwater.

I have not gone into individual analyses of the fatalities but an interested reader by referring to the provisional Report on Fatalities will see the relevance of these comments to the individual cases.

Yours sincerely  
Peter RL Mosse  
FAUI Instructor 347

#### EDITOR

In fairness to the author of the Provisional Report it should be noted that as the Case Resumes, the Significant Factors, and the Table all noted the occurrence of SEPARATION in the eleven cases in which it occurred, it was assumed that readers would identify this factor for themselves. For this reason the Discussion listed the somewhat less obvious factors "whose significance deserves fresh consideration". It was indeed remiss to make such an assumption and the author apologises.

#### **RADIAL KERATOTOMY THE DIVER'S DILEMMA**

PO Box 6052  
St Kilda Road Central VIC 3004

Dear Sir

I would like to relate my experience concerning radial keratotomy in the hope that one or more members of SPUMS may be able to cast some light upon the subject and its ramifications for divers.