AN INCIDENT DURING POOL TRAINING

David Mclvor, PhD, BSc (Hons)

Regional Director, Victorian Region, FAUI

This is an incident that occurred while I was personally involved in training some University students in the use of Scuba, in a swimming pool.

I was instructing a group of four, two boys and two girls, on the second night of their course. The group as a whole was progressing rapidly and appeared to be in no bother with finning, mask clearing, swimming without mask, and removing/replacing regulators. The incident in question occurred during the introductory buddy breathing session.

After a few minutes practicing buddy breathing with them in the shallows, I instructed both groups to swim two laps of the pool whilst buddy breathing. The two girls had swum some one and a half laps (100 m) and were at the 7 foot mark of the pool when the girl who was receiving air stopped swimming, gave the "up" sign to her buddy, and slowly commenced to ascend ... exhaling all the way. However, about a foot from the surface she faltered, appeared to cough several times and began to sink again, now making no effort to regain the surface. Fortunately I was about two feet away from her during this ascent and was able to bring her to the surface as soon as she began to sink, probably within 5-10 seconds. I then removed her mask, brought her to poolside, removed her tank, and lifted her out of the water. During this time she was attempting to cough and retch. She was placed in the coma position, neck and throat extended, and covered with towels. At the stage she was pulled from the water she appeared semi-conscious (at best) and was coughing up fair amounts of clear mucus. She can recollect nothing from this period. After about a minute in this condition she appeared to regain full consciousness, clearing her mouth of mucus (I checked the colour of the mucus) and kept saying that she couldn't remember what happened. Having now recovered, except for pains in the lower chest, she was allowed to go and change, assisted to the change rooms by her girlfriend.

"I then range Dr X to discuss the incident and get his recommendation: he had given her a Diving Medical the week before. He agreed that she be taken to the nearby hospital, which had a good thoracic unit. After she was dressed she still complained of a sore chest and had developed a rather raspy cough. At this stage she admitted to a slight bout of bronchitis the week before. I then drove her to the hospital, where she was admitted to outpatients, examined by a doctor and had an X-Ray taken before being allowed to go home with instructions to return the next day for a checkup.

However, as a Senior Instructor from a reputable diving school I felt well enough informed to voice my concern at the attitude shown at the hospital. After my student had supplied her details to the person on the desk I was asked to supply further information on what had happened. I gave them the same details as supplied here, viz., semi-consciousness, clear mucus, coughing underwater (and therefore possible inspiration of water), chest pain, etc. I warned them of the possibility of some barotrauma and urged the hospital to contact Dr X, "who was an expert in the field of diving medicine", for further information. The person in charge, after some hesitation, wrote his name on the very top of the page, which proved to be the butt of the tear-off form which was given to the examining doctor. So much for my recommendation! It was some ten minutes later (after a possible near-drowning and lung rupture event) that the patient was taken away for examination, still coughing and complaining of chest pain. Five minutes later the doctor came and asked me some questions, one of which was "Is there any chance of bends?" I replied that this was unlikely in a 7 foot pool and repeated my recommendation that $\operatorname{Dr} X$ be contacted as he was familiar with the case and with diving medicine.

The doctor told me rather frostily that she had done some diving and was therefore familiar with the problems!! I then told her that Dr X had even suggested that the patient may have to be kept overnight and that if Dr X was not contacted then I would ask to speak to the Senior Doctor on duty (a tactic suggested to me by Dr X if I was not satisfied with the treatment). There were no bad feelings, just persistence on my part. Anyhow, Dr X was contacted, the case discussed, an X-Ray taken, and the girl allowed to go home.

"There were some additional facts that may be of interest in relation to this incident:

- 1. The student had had a lot of difficulty with the standard swim test (200m swim, 2 mins tread water, duck dive) and in fact had to have two attempts (on two nights). From my experience, people who have trouble with the swim test will have some trouble with aspects of the course call it watermanship if nothing else more quantitative.
- 2. The student has a small face and consequently had some trouble finding mask to fit. She also had some trouble with water up her nose from this complaint (see item 1). However this problem appeared to have been overcome.
- 3. I had followed the two students into the deep section of the pool and was only 2 feet away from them when the incident occurred. I found it interesting how she appeared to give up her attempts to reach the surface. I feel that she would have drowned if left to her own efforts. Moral: be with students when they are in deep water.

"As a personal comment I would add that I believe it is incumbent upon SPUMS to inform staff of hospitals, particularly casualty departments, of the proper procedure to follow for diving accidents. This should include a list of telephone numbers of people to contact in an emergency or if in doubt. Furthermore, I believe that just as diving instructors have had to accept the medical world's interest and opinions in matters of diving instruction, so must the medical world be encouraged to accept that diving instructors (or at least FAUI 3 Star Instructors) do have some specialist knowledge of diving medicine and can certainly supply detailed information relevant to diving injuries. Such information should not be patronisingly dismissed as "coming from a non-medically orientated lay person."

(EDITOR: This article provided both an interesting case report and an acute assessment of the correct status of the trained diving instructor vis-a-vis diving problems. It may be noted that is has for long been the policy of SPUMS to welcome diving instructors and interested divers as associate members and the journal has used many lay articles.)

* * * * * * * *

NB: All "Sea Secrets" and "Sea Frontiers" articles appearing in this issue are reprinted from "SEA SECRETS" the official magazine of The International Oceanographic Foundation.

* * * * * * *