LETTERS TO THE EDITOR

DIVING AFTER ROUND WINDOW RUPTURE AND REPAIR

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17/7/94

Dear Editor,

I have been a keen diver for the past 25 years. About 18 months ago I ruptured the round window in my ear while snorkel diving. I had an operation which involved a full graft as the whole of the round window was blown out. My hearing was restored almost back to normal, but I was left with tinnitus and of course the doctor said that I should not dive again.

I have heard of divers suffering this injury and being told not to dive again, but they have ignored medical advice and continued diving after a healing period. I now know personally two divers who have had a round window rupture and an operation to repair it. They have stayed out of the water for six months and then returned to diving, without any problems, against their doctors' advice.

I would like to do the same but I do not have the courage to give it a go. I am writing to find out if SPUMS has carried out any research on this subject or is aware of any research that has been done and if you could advise me on how to go about obtaining it.

Anxiously awaiting your reply.

Peter Fitzpatrick

The Editor's reply to this letter appears below.

26/7/94

Thank you for your interesting letter which arrived today. I would like to publish it in the SPUMS Journal as a Letter to the Editor as it an important topic, and one that is seldom discussed.

Unfortunately I do not know of any studies about divers who have gone back to diving after rupturing an inner ear window. Like you, I know of two who did, but one of them ruptured the same window again and was very lucky to get his hearing back the second time. He decided that the risk of permanent loss of hearing was too great for him to accept and gave up diving. The other I saw when he had the second ear's ruptured window repaired. He told the surgeon that the only thing that made his very busy life

worth living was diving every weekend. He decided that he would rather be completely deaf rather than not dive.

The reason that divers are advised not to dive after a round window rupture repair is that there is a fairly high risk of repeating the accident unless one changes one's diving technique and makes quite certain that the pressure in the middle ear remains at ambient (surrounding) pressure at all times. Doctors feel that risking total deafness is not sensible behaviour and should not be encouraged.

From your story it is likely that you did not equalise properly on the way down and that as a result your eardrum was pushed in too far, pushing the stapes far into the inner ear and the round window out. The other common cause is trying too hard to equalise and forcing extra fluid into the inner ear, from the inside of the skull, so blowing out the round window.

In either case the repaired window membrane is likely to be weaker than the original so more likely to be damaged if equalisation fails.

The decision to dive is for the diver to make. The doctor's advice is based on the considerable social handicap of complete deafness. The chances of getting one's hearing back the second time in the same ear are very low. Someone who is completely deaf in one ear is able to hear with the good one, but if that goes he is completely cut off from conversation, unless it is in deaf and dumb sign language.

To put the decision in perspective, if I had a round window rupture, and got my hearing back, I would prefer to live out my days with that hearing rather than risk losing it. I would sell my gear. But what you do depends on how much your hearing means to you and only you can decide that.

I would be most interested to hear from your acquaintances who have gone back to diving to learn more about how they did the damage and why they decided to go back to diving. It is only by hearing from people that we can find out what you want to know.

I hope that my explanations have been of some use to you.

John Knight

The Editor is willing to act as a collector of information until some member, perhaps a diving ENT surgeon, comes forward to carry out a study of divers who have gone back to diving after having an inner ear window repair.