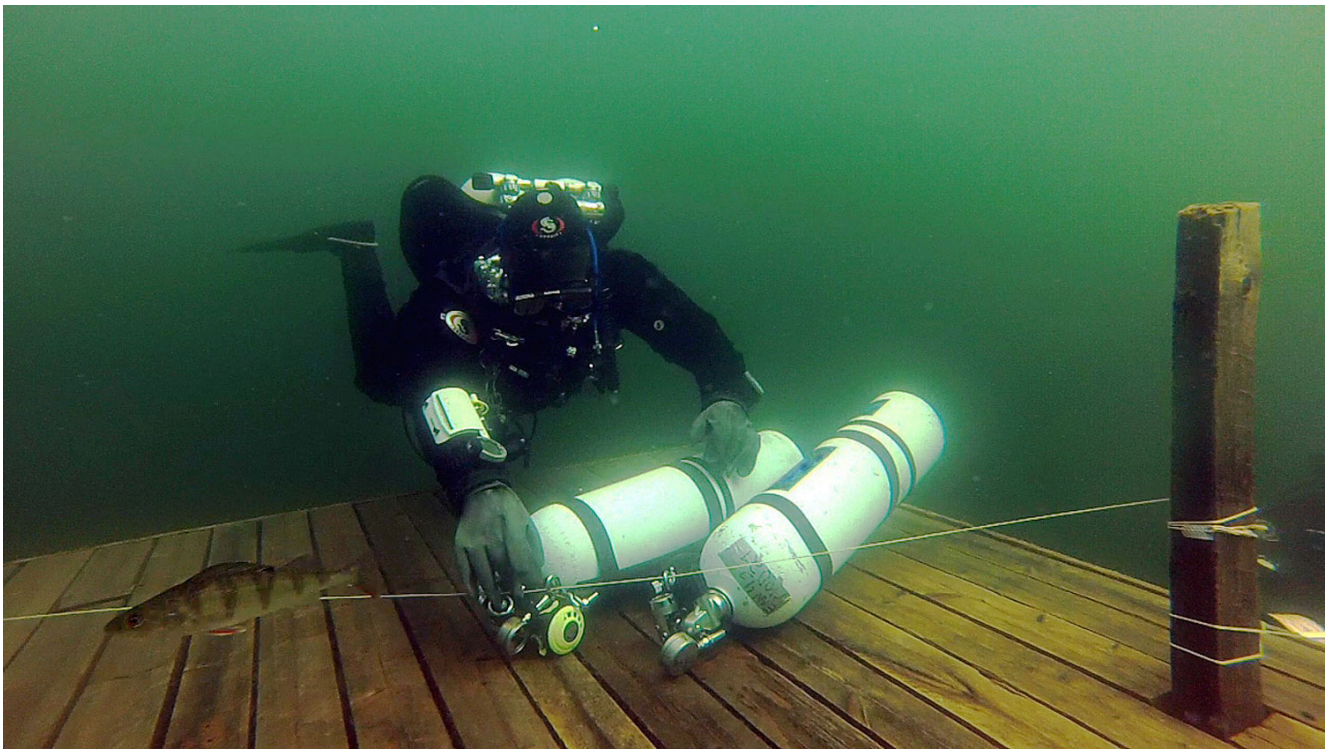
Ear Barotrauma Following A Local Lake Dive

The Incident

A Finnish diver and her dive buddy were making their first dive of the day in Lake Vesijako, Finland in their drysuits. They descended to a maximum of two metres in the bracing 6^{0}C water, but the diver couldn't equalise the pressure in her right ear and called the dive. Two days later, her ear still felt blocked and hurt a little bit so she decided to go see a local health centre physician.

The doctor diagnosed her as having inflammation in the middle ear and prescribed her antibiotic ear drops and sent her home. However, that night, she experienced a sharp pain in her ear, which went away, and her ear started bleeding. The diver called the local hospital and then went in for tests. They determined that she had a ruptured eardrum. She was sent home and continued with the antibiotic drops.



After nearly a week, the diver still felt pressure in her right ear, which remained blocked, and her hearing in the ear was diminished. She grew concerned and emailed the DAN Europe hotline (emergency@daneurope.org) hoping to be able to meet with an ear specialist who was knowledgeable about diving injuries. She wanted to make sure that she wouldn't have a permanent injury and wanted to know when she could safely return to diving.

The DAN Hotline team immediately opened an assistance case file for her, called the diver and put her in touch with DAN Europe's Finnish Diving Medical Officer (DMO). After speaking to the diver and reviewing her reports, the doctor determined that she had had an external ear squeeze due to her drysuit hood at the beginning of the dive which forced her to terminate the dive.

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According to the DMO, “The bloody and swollen ear canal supports this view. Hence, I think it is external ear barotrauma and not infection. Unfortunately, her primary general practitioner misinterpreted the barotrauma as an infection, or alternatively, there was a secondary infection developed after initial barotrauma,“ he said. “In my opinion this is a diving related problem and falls within the coverage of her policy.”

The DMO then provided her with a referral to an Ear, Nose and Throat (ENT) specialist who was also a diving physician and so very familiar with this type of diving injury. The diver saw the specialist and forwarded the results to the DAN Europe team, which they then shared with the Finnish DMO for advice and a medical opinion. “The report was very clear and along the same lines as my interpretation that the primary insult was external ear barotrauma and prescribed drops for the ear. The ENT specialist also suggested that it may be beneficial to perform oro-nasal endoscopy to control the situation.”



The hotline team then arranged another call for the diver to discuss her case with the local DMO, who instructed her to protect the perforated ear from water and let it heal. If there is any more pain, or any excretion comes from the ear, she was told to get in contact again with the ENT. They also scheduled her for a control visit in one month’s time to check that the perforation and ear canal were well healed.

With the acute phase of the injury now over, the DAN Europe hotline team closed the emergency assistance file, and the claims department contacted the diver to proceed with the administrative side of the case. The diver promptly provided all the documentation needed to file the claim for her medical

expenses. A few weeks later, the diver was reimbursed for the doctor visits, medicines and transportation costs related to the acute phase of her diving accident that occurred within her country of residence.

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