Latex allergies and diving equipment

Statistics indicate that 1 to 6% of the general population is allergic to natural rubber latex, and in rare cases, reactions can be so violent that they may cause death. Usually, they occur when the latex allergens touch the skin. It is also important to note that even in people who do not have an allergy to latex, contact with these allergens over an extended period of time could cause them to become highly sensitive. When thinking of diving equipment and latex, the first thing that comes to mind is dry suits, which usually have latex wrist and neck seals. Opting for a dry suit with silicone or neoprene seals would seem to solve the problem, but sometimes latex can be found in unexpected places.

As recreational divers, we've all seen the relatively new fad of using a bungee necklace, which actually started a long time ago with technical and sidemount divers. What is a regulator bungee necklace? With this slightly pretentious name, all we are really describing is an elastic piece of rubber chord worn around the neck to hold the alternate air source in position. The advantage is that, in case of an emergency, it will be very easy to locate and use. All you have to do is put a hand under your chin, much easier than groping around looking for your spare regulator attached to your BCD. Besides, it is so simple that most divers prefer making their own bungee necklace at home. After all, it's just a piece of flexible chord with a couple of fishermen knots.

But are there any disadvantages to using a bungee necklace? The story of a 49-year-old Australian male

technical diver living in the USA, told in a case report by Divers Alert Network^{III}, can help us see that there can be a curious downside to the matter. He traveled to Nevada for a dive show with his diving buddy, both of them with thousands of dives under their belt. The day before the show, they decided to go take some pictures of an underwater canyon at a depth of 45 meters, in Lake Mead, choosing the sidemount configuration; this means having two twin tanks, one on each side, and two sets of regulators to breathe from, to use alternatively. They used air and EANx50, and their dive lasted 39 minutes, including decompression. The Australian diver wore a double necklace around his neck to keep both regulators at hand, which he had already used for around 100 dives.



He had eaten dark chocolate before the dive, and had a couple of beers after diving. He started feeling a certain numbness on the left side of his upper lip, and within a half an hour his face started swelling visibly. By dinner time, the whole left side of his face was swollen, and filled with liquid, even if he did not feel any pain and could eat normally. The swelling persisted for an entire day before starting to get better. He called DAN and the doctors immediately suspected some kind of allergic reaction. After inspecting all pieces of equipment, the final findings indicated that the bungee necklace used was worn out. Some rubber filaments coming out at either end of it had come into contact with his face, causing this pretty serious allergic reaction. He was tested for allergies and was indeed highly sensitive to latex, which was found in the filaments of the bungee necklace.

What can we learn from this story? That our diving equipment should always be in perfect condition, even if we don't even suspect we could have allergies. Especially experienced divers tend to overlook this key aspect: safety needs to be our top priority, no matter how many hours we've spent underwater. Too often we get lazy and forget that, to avoid problems, even small and apparently insignificant pieces of equipment, such as a bungee necklace, do get worn out with time and need to be replaced. Always better safe than sorry!

^{III}See: <u>Case report: acute facial swelling in a recreational technical diver</u> by Peter Buzzacott, William K. Dolen, James Chimiak, Physiological Reports, 2017