

Sore Toes: DCS or Fin Foot?

DAN® medics answer your questions about dive medicine.

Q After some recent dives, some of my toes were really sore. Within a few hours they looked bruised and were extremely painful; I could hardly walk. It took several days for the bruising and pain to go away. Could this have been decompression sickness (DCS)?

A This was unlikely to have been DCS due to the location and the symptoms you described. DCS symptoms are not known to isolate in specific digits. Your presentation suggests a condition known as reactive hyperemia, which may result after a period of reduced blood flow to an area of the body. When circulation is fully restored following constriction, the blood vessels dilate and may become engorged with blood. This can cause discoloration ranging from dark red to the bruised appearance you described as well as intense pain.

If fin straps are too tight or a diver forces his foot into the foot pocket too firmly, a steady mechanical pressure on the blood vessels may result. This is colloquially known as “fin foot.” Colder water may also contribute to the constriction of the blood vessels, further reducing blood flow to the area. Usually this condition does not require medical intervention other than pain management. Staying off the affected foot as much as possible, elevating it and applying warm compresses will typically improve comfort. Ensure proper fit of your booties and fins, and don’t overtighten heel straps.

— Marty McCafferty, EMT-P, DMT

Q I have some tanks in my garage that are filled to 3,000 psi, and I have not used them in many months. Is there any hazard to breathing the air in these tanks after a prolonged period? Does the air in them need to be replaced after a certain amount of time?

A We’re not aware of any studies that address this issue specifically. To comply with recommended safety guidelines, all scuba cylinders should be visually inspected annually. The gas in the cylinder is replaced in the course of the visual inspection. Experts have discussed whether air in a cylinder can actually “go bad,” but without any data, arguments for or against using the air after a prolonged period are purely speculative. There is no clear mechanism to explain why the air would not be suitable for use, and any theoretical risk is avoided by the annual inspection.

— Marty McCafferty, EMT-P, DMT



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