Sea turtles suffer from the bends

Decompression sickness (DCS), also known as the bends, has been diagnosed for the first time in sea turtles, according to research by a team of international scientists, including those from the Zoological Society of London (ZSL).

The research, published in *Diseases of Aquatic Organisms*, shows for the first time that DCS occurs in the loggerhead sea turtle. DCS was previously thought to only occur in humans and some whale and dolphin species that have ascended too quickly from diving.

Sea turtles are often caught accidentally in commercial fishing nets. Those that appear to be active are usually released immediately back to sea. This study suggests that some live turtles, while appearing initially active, possibly have DCS and may die following release.

Dr Paul Jepson, co-author and marine vet at ZSL, comments: “This is the first time that the bends has been confirmed in a marine reptile. It also shows that endangered sea turtles accidentally caught in fishing nets are at risk of dying, even if they initially appear to be still alive when brought up to the sea surface. Ideally we want to avoid sea turtles being caught in commercial fishing activities but, if they are, I hope that this research will make fisheries more vigilant about unintentionally catching sea turtles and the risks of DCS from rapid ascent.”

In the study, 29 sea turtles accidentally caught in commercial fishing nets off the coast of Spain were diagnosed with DCS. Two were treated with human recompression protocols carried out at Oceanographic, Valencia, and responded well. They were subsequently released back into the Mediterranean Sea.

These findings have direct implications for the conservation of sea turtles since many more may die as a result of commercial fishing activities than previously thought. Results from the study, including the successful treatment of DCS in sea turtles, can be applied to the conservation of these species worldwide.
Marine turtle populations are declining in the Mediterranean Sea, and six out of seven sea turtle species are endangered worldwide.

DCS occurs when dissolved gases form bubbles inside the body on depressurisation and most commonly refers to problems from underwater diving. In humans, DCS can produce many symptoms from joint pain to paralysis and death.

ENDS

Editors’ Notes

Reference

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ZSL
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