RUBICON FOUNDATION

Please use this identifier to cite or link to this item:
http://archive.rubicon-foundation.org/2753

Title: The response of fish blood cells, particularly thrombocytes, to decompression

Authors: Casillas, E
Smith, LS
D'Aoust, BG

Issue Date: 1976

Abstract: The effects of decompression on various blood-cell types in chinook salmon (Oncorhynchus tshawytscha) were investigated using a 4-liter hyperbaric chamber. Thrombocytes (platelets) were found to decrease significantly in numbers following lethal and nonlethal decompressions. The response was highly dependent on depth, gas solubility, and rate of decompression, whereby increasing depth or gas solubility caused greater and faster declines of thrombocyte levels. Return of thrombocyte numbers to normal values usually occurred within 48 hours, except after the more severe decompressions where recovery was never fully attained during the sampling period. Erythrocyte levels increased significantly 1 day after a severe decompression, suggesting hemoconcentration. Leucocytes appeared not to respond to decompression; they were not decreased compared to normal levels, although they were significantly decreased compared to levels of the chamber controls in the nonpressurized chamber. The results are discussed in relation to possible involvement of the fish's blood-coagulation system after decompression. Animals Atmosphere Exposure Chambers *Atmospheric Pressure Blood Coagulation *Blood Platelets Salmon/*blood Support, U.S. Gov't, P.H.S.

Description: Undersea and Hyperbaric Medical Society, Inc. (http://www.uhms.org)

URI: PMID: 969029
http://archive.rubicon-foundation.org/2753

Appears in Collections: Undersea Biomedical Research Journal

Files in This Item:

File	Size	Format	
969029.pdf	1327Kb	Adobe PDF	View/Open

Show full item record