

Search Rubicon

Go

[Advanced Search](#)

[Rubicon Research Repository](#) >
[Rubicon Foundation Archive](#) >
[Undersea Biomedical Research Journal](#) >

[Home](#)

Browse

[Communities & Collections](#)

[Titles](#)

[Authors](#)

[By Date](#)

Sign on to:

[Receive email updates](#)

[My Rubicon](#)
authorized users

[Edit Profile](#)

[Help](#)

Please use this identifier to cite or link to this item:

<http://archive.rubicon-foundation.org/2432>

Title: Effects of age and magnesium ions on oxygen toxicity in the neonate chicken

Authors: Torley, LW
Weiss, HS

Keywords: hyperbaric
age
magnesium ions
oxygen toxicity
animal
chicken

Issue Date: 1975

Abstract: White Leghorn male chicks, 2-6 days and 4 weeks old, were injected with MgCl₂ (2 mM Mg/kg body weight) and exposed to 100% O₂ at 75 lb/in² (approximately 5 atm). Compared to saline-injected controls, average time to onset of convulsions was delayed 37% in the younger group with no significant difference in the protective effect during days 2-6. The delay in onset of convulsions was 66% in the 4-week-old group. The protective action of Mg⁺⁺ in the chick agrees closely with that reported for the mature rat. Chicks treated with Mg⁺⁺ did not appear depressed. Susceptibility to hyperbaric O₂ convulsions increased uniformly between the 2nd and 6th day, with time to onset of convulsions decreasing by 1.4 min/day from the 19.3 +/- 1.01 (SE) min observed at day 2 for saline controls. Between the 6th and 28th day, susceptibility was relatively stable with time to onset decreasing by about 0.2 min/day in controls.

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

URI: [PMID: 15622741](https://pubmed.ncbi.nlm.nih.gov/15622741/)
<http://archive.rubicon-foundation.org/2432>

Appears in Collections: [Undersea Biomedical Research Journal](#)

Files in This Item:

File	Size	Format	
15622741.pdf	686Kb	Adobe PDF	View/Open

Show full item record

All items in DSpace are protected by copyright, with all rights reserved.

Copyright © 2004-2006 Rubicon Foundation, Inc. - [Feedback](#)