

ACCIDENTAL INGESTION OF CONCENTRATED HYDROGEN PEROXIDE

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Ingestion of just a small amount of industrial concentrations of hydrogen peroxide can create sufficient volumes of oxygen to form bubbles within the vascular system. When these bubbles become arterialized, permanent neurological deficits and fatal outcomes have been reported.

OBJECTIVES: Attempt to overcome intravascular obstruction where bubbles remain. Hyperoxygenate areas of decreased cerebral blood flow and also attempt to decrease cerebral edema and minimize ischemia, which was a direct result of accidental ingestion of industrial concentration of hydrogen peroxide.

METHODS: A 60 year old white male inadvertently ingested approximately 15cc's of 35% hydrogen peroxide. Within five to ten minutes following patient collapsed and EMS was called. He was transported via EMS to Chilton Hospital. Upon arrival to hospital patient's mental status became altered and he had multiple episodes of hematemesis. Poison control was called and case discussed with toxicologist who agreed with securing airway, protonix, GI consult, Endoscopy and Hyperbaric treatment. After endoscopy, patient was transferred to ICU. Patient was being weaned off respirator and it was discovered that patient was unable to move any extremities Hyperbaric consult was requested and performed by Chilton Hospital M.D. Upon telephone consultation with a national hyperbaric expert, it was decided that patient may benefit from proceeding with US Navy Treatment Table 6 in a monoplace hyperbaric delivery system. Following an extended Table 6, patient was moving upper extremities upon command. It was therefore, elected to continue with BID HBO, at 2 ATA.

RESULTS: By treatment number 10 the patient was ambulatory, moving all extremities, alert and essentially neurologically intact with only a loss of fine finger control in this left hand. He was then discharged from our service at that time.

CONCLUSION: Highly concentrated hydrogen peroxide is a potentially dangerous life threatening event. It can enter the body via several routes. When ingested, large amounts of oxygen are generated and can be sufficient to form bubbles. Arterial embolization is a life-threatening emergency. Prompt diagnosis is imperative and provision of HBO therapy is the essential standard of care.

Word Document of Abstract MUST BE A WORD DOCUMENT - If you do not attach, you must email a copy

KEY WORDS Specify up to 5 key words for database search ingestion of hydrogen peroxide

MAINTANCE OF CERTIFICATION Q/A

PLEASE SUBMIT THREE (3) QUESTIONS AND ANSWERS FOR YOUR ABSTRACT (These Q/A will be used for Maintenance of Certification Credits "MOC") The questions shall be formatted based on a simple one or two sentence stem. The answer must be listed as one of five answer options. Please be sure to indicate the correct answer for each one.

MOC Question 1 *

MOC Q1 Answers: list a-b-c * true, False, I don't know

MOC Q1 Correct Answer *

MOC Question 2 *

MOC Q2 Answers: list a-b-c * Navy dive table 5, Navy Dive table 6, no navy dive table is recommended

MOC Correct Answer 2 *

MOC Question 3 *

MOC Q3 Answers: list a-b-c * 3%, 6% OR 33%

MOC Correct Answer 3 *

CV REQUIRED

You are required to submit a brief CV for CME purposes with this form, please make this just ONE page long and indicate your training, degrees obtained and any representative publications, also indicate if you are an associate or regular member.

CV * I have been a nurse for 35 years. I received my Associates in Nursing from County College of Morris in NJ. I have a BSN from Felician College. I have also obtained my WOCN from Memorial Sloan Kettering Cancer Center in NY. Worked as Diabetes Educator and started an inpatient and outpatient diabetes educational program that is approved by the ADA; started inpatient and outpatient ostomy and wound care program at Chilton Hospital. Facilitate the monthly ostomy support group at Chilton Hospital. I also started an outpatient pain management program at Chilton Hospital. Attended Primary Training in Hyperbaric Medicine Program in South Carolina in 2007. Became CHRN with distinction in March of 2012. Also attended Fire and Safety Directors course in San Antonio, Texas in 2008. I am a member of the UHMS , AAWC, Baromedical Nurses association, New Jersey First Aide Council and a delegate. I have been an NREMT for ten years and serve as trustee for my local chapter. I also carrier a valid ACLS(ADVANCE LIFE SUPPORT) .I am presently the Program Manager and Fire and Safety Director of The Comprehensive Wound and Hyperbaric Healing Center at Chilton Hospital. located in NJ.

TOPICS FOR PRESENTATION

Topics for presentations: SELECT ONLY ONE PER SUBMISSION

Topics Diving/Decompression Illness: Theory & Mechanisms

Diving/Decompression Illness: Clinical Aspects

Diver Management & Diving Equipment

Carbon Monoxide Poisoning

Chamber Safety, Techniques and Patient Management

Wound Healing

Hyperbaric Oxygen Mechanisms

Hyperbaric Oxygen Therapy

PRESENTATION

All abstracts must be presented in poster format, without exception. In addition, presenters may be invited to present an abstract orally in the general meeting, resident/trainee competition (if eligible), or in the Associates session (if eligible). Principal Investigators for NAVSEA and ONR sponsored research and development (if selected) will present an oral presentation if their work is continuing or completing with data not presented elsewhere, a poster format presentation will be utilized for new projects.

WILLING TO PRESENT:

If invited, would you be willing to present your Abstract?

In General Meeting? * YES

NO

Residents'/Trainee Competition

Submit this abstract to the Residents'/Trainee Competition: Abstracts eligible for the Residents'/Trainee competition are those to be presented by a medical student, resident, PhD trainee, or fellow. This individual need not be the lead author, but must present the work at the meeting.

Residents'/Trainee Y/N * YES

NO

AUTHORIZATIONS

YOU MUST ANSWER YES OR NO TO THE FOLLOWING QUESTIONS

Permission to Record *Mandatory for Oral Presentations YES

NO

DECLARATION OF HELSINKI

Does the research reported in this abstract follow the principles embodied by the declaration of helsinki (stated in each issue of Undersea & Hyperbaric Medicine) with approval by the appropriate animal/human use committee, if appropriate?

Helsinki Principles: Y/N * YES

NO

PRESENTED ELSEWHERE?

Was your Abstract presented Elsewhere?

Abstract Presented Elsewhere * NO

YES

If yes Elsewhere: Where/When

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Financial relationships are those relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, consulting fee, honoraria, ownership interest (e.g., stocks, stock

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Do you have relevant financial relationship with proprietary entities producing health care goods or services related to the content of this activity?

If NO: You may inform your audience that you have no relevant financial relationship with commercial interest

Financial relationship Y/N * YES

NO

IF YES

If you answered yes to the questions above, please identify the company and the nature of the relationship below.

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Nature of Relationship(s)

RESEARCH GRANT

Was your research supported by a Grant or R&D Contract?

Grant or Contract Y/N * NO

YES

Grant: If Yes, originator

AGREE

I HAVE READ AND UNDERSTAND MY AUTHORIZATION AND DISCLOSURE OBLIGATIONS AS OUTLINED ABOVE.

DATE AGREED TO *