Diving and Hyperbaric Medicine

The Journal of the South Pacific Underwater Medicine Society (Incorporated in Victoria) A0020660B and the European Underwater and Baromedical Society

ISSN 1833-3516





ABN 29 299 823 713

Index for Volume 41, 2011

March 2012

KEY WORDS FOR DIVING AND HYPERBARIC MEDICINE

AbaloneCommunicationEvidenceAbstractsCompressorsExerciseAccidentsComputersExogenous poisonAdolescentsComputers – divingExpert witness

Aerobic capacity Constitutional amendments Extraglottic airway devices

Age Copyright Eyes

AirCoroner's findingsFire or explosionAir embolismCorrectionsFirst aidAllergyCritical appraisalFitness to diveAltitudeDAN – Divers Alert NetworkFlowchart

Anaerobic Data Flying (and diving)
Anaesthesia Deaths Freediving
Antarctica Decompression Gas gangrene
Antioxidants Decompression illness Gas solubility
Arterial gas embolism Decompression sickness Gases

Ascent Decompression tables Gas-induced osmosis

AsthmaDeep divingGenderAutismDentalGeneral interestAutobiographyDES – Diver Emergency ServiceGenetics

Autopsy Diabetes Genitourinary tract

Aviation DIMS Gleanings (from medical journals)

Bacteriology Disabilities Haematology Health Barometric pressure Disability Disabled diver Health status Barotrauma Diver numbers Bell diving Health surveillance Health surveys Beta blockade Diving Bibliography Diving accidents Hearing Biochemistry Diving at work Helium

Biology Diving deaths Helium pharmacokinetics
Biomarkers Diving industry High pressure nervous syndrome

Blood pressure Diving organisations Hip arthroplasty
Blood substitutes Diving reflex History

Blood substitutesDiving reflexHistoryBlood sugar levelDiving researchHuman skin equivalentBone healingDiving safety memosHyperbaric facilitiesBone necrosisDiving scholarsHyperbaric medicineBook reviewsDiving tablesHyperbaric oxygen

Brain injury Diving theory (see Physiology) Hyperbaric oxygen therapy
Breath-hold diving Doppler Hyperbaric oxygenation
Bronchial provocation testing Drowning Hyperbaric research
Bubbles Draws

Bubbles Drugs Hypercapnia
Buccal pumping Drysuit Hyperoxia

Buddies Dysbaric osteonecrosis Hyperthermia (see Thermal problems)

Buoyancy Ear barotrauma Hyperventilation

Caissons Ear infection Hypothermia (see Thermal problems)

Calciphylaxis Echocardiography Hypoxia Cancer Ecology Ice Capnography **Economics** Immersion Carbon dioxide Editorials Immunology Carbon monoxide Education Immunosuppression Cardiovascular Emergency ascent Implantable devices

Incidents Case reports Endocrinology Cave diving Endothelium Indigenous divers Cerebral arterial gas embolism (CAGE) Enriched air - nitrox Infectious diseases Cerebral blood flow **ENT** Inflammation Chest injury Envenomation Injuries Children Environment Inner ear

Chronic wounds Environmental symptoms questionnaire Inner ear barotrauma

CirculationEnzymesInner ear decompression illnessClinical auditEosinophiliaInner ear decompression sickness

Clinical toxicology Epidemiology Instruction – diving

Closing volume Epilepsy Insurance (see Legal and insurance)

CoagulationEquipmentInvestigationsCochrane LibraryErgonomicsIrradiationColdEthicsIsotope

Sharpened Romberg test Jellyfish Pain

Labyrinth Panic Shivering Land animals Parasite Side effects Legal and insurance Patent foramen ovale (PFO) Simulation Letters (to the Editor) Pathology Smoking Patient monitoring Lidocaine Snorkelling

Lignocaine Soft-tissue radionecrosis Pearl divers

Lipids Performance Solo diving Logistics Perfluorocarbons Spearfishing Standards Low air Permeability Lung compliance Personality Statistics

Lung function Pharmacology Stress (see Trauma and stress)

Malaria Pharmacology - marine Submarine

Malignancy Physiology Surface decompression Malignant otitis externa Platelets Surface supply breathing apparatus

Marine animals Policy (SSBA)

Textbook

Medical conditions and problems Postural control Surfactant Medical database Pregnancy Surveillance Pressure Medical kits Survey Profile Medical society Symposium Technical diving Medicals – diving Prolonged QT syndrome Medications Prosopagnosia or visual agnosia Teeth Meetings Proteins Telemetry

Membership lists Psychology Pulmonary barotrauma Menstrual cycle Theory-based advice

Pulmonary function Thermal problems (hypothermia and Metabolism Microparticles Pulmonary oedema hyperthermia)

Pulmonary oxygen toxicity Mild hyperbaric therapy Tourism Military diving **Qualifications** Toxicity Ouestionnaire Mixed gas **Toxins** Models Radiological imaging Training

MOPS (maintenance of professional Radiotherapy Transcutaneous oximetry

> standards) Rebreathers/closed circuit Transducer Rebreathers/semi-closed circuit **Transport**

Morbidity Motion sickness Rebreathing Transpulmonary pressure Multi-level diving Recall Trauma and stress Multiple sclerosis Recompression Travel medicine Musculo-skeletal Records Traveller's diarrhoea

Recreational divers Narcosis Treatment Recreational diving

Nasal decongestants Treatment sequelae Regression analysis Trimix Near drowning Necrotising infections Repetitive diving Tunnelling Reprinted from Unconscious Neuroprotection Rescue Underwater diving Nitric oxide Research Underwater hazards

Nitrogen Resort diving (see Tourism) Underwater medicine Respiratory Unit pulmonary toxic dose Nitrogen narcosis

Nitrogen pharmacokinetics Resuscitation Vaccination Noise Reverse dive profiles Vasoconstriction Non-steroidal anti-inflammatories Review article Ventilators Notice Right-to-left shunt Vertigo

Video and DVD reviews Numbers Risk

Risk assessment Vision Nursing

Risk factors Visual analogue scale Obesity Obituary Risk management Vital capacity Occupational diving Safety Vitamins

Occupational health Salt water aspiration Water Operations - diving Salvage Women

Working in compressed air Optometry Saturation diving Osteoarthritis Scientific diving World Wide Web

Osteoradionecrosis Scuba Wounds Outcome Scuba accidents Wreck diving Writing - medical Oxygen Scuba diving

Oxygen consumption Scubadoo Xenon

PADI Severity

EDITORIALS

The Editor's offering

Davis M

2011;41(1):1.

2011;41(2):57.

2011;41(3):117.

2011;41(4):181.

The President's pages

Germonpré P

Medical society, general interest

2011;41(1):2.

2011;41(2):58.

2011;41(3):122.

2011;41(4):182

Bennett M

Medical society, meetings

2011;41(3):122-3.

INVITED EDITORIALS

The foundations for today's future

Elliot D

Editorials, medical society, training, standards, history, general interest

2011;41(3):118-20.

The proceedings of the inaugural meeting of the European Undersea Bio-Medical Society 1971

Barnard EEP

Medical society, meetings, history, general interest 2011;41(3):120-1.

ORIGINAL ARTICLES

Respiratory rate can be modulated by long-loop muscular reflexes, a possible factor in involuntary cessation of apnea

BalestraC, Levenez M, Lafère P, Dachy B, Ezquer M, Germonpré P

Musculoskeletal, metabolism, breath-hold diving, respiratory, physiology, research

2011;41(1):3-8.

The use of drugs by UK recreational divers: illicit drugs St Leger Dowse M, Shaw S, Cridge C, Smerdon G Recreational divers, drugs, risk factors, health survey, questionnaire, epidemiology

2011;41(1):9-15.

The use of drugs by UK recreational divers: prescribed and over-the-counter medications

St Leger Dowse M, Cridge C, Smerdon G

Recreational divers, drugs, risk factors, medications, fitness to dive, health survey, epidemiology

2011;41(1):16-21.

Mental health measures in predicting outcomes for the selection and training of navy divers

van Wijk CH

Psychology, military diving, training, performance, questionnaire, research

2011;41(1):22-6.

Changes in oxygenation in mechanically ventilated critically ill patients following hyperbaric treatment

Bingham G, Millar I, Koch S, Paul E, Varma D, Pilcher D

Hyperbaric oxygen therapy, ventilators, pulmonary function, physiology, right-to-left shunt, clinical audit 2011;41(2):59-63.

Transportation of divers with decompression illness on the west coast of Scotland

Wilson CM, Sayer MDJ

Decompression illness, decompression sickness, transport, recompression, clinical audit

2011;41(2):64-9.

Provisional report on diving-related fatalities in Australian waters 2006

Lippmann J, Walker D, Lawrence C, Fock A, Wodak T, Jamieson S

Diving deaths, scuba, breath-hold diving, closed-circuit rebreathers, diving accidents, case reports

2011;41(2):70-84.

Risk factors for running low on gas in recreational divers in Western Australia

Buzzacott P, Rosenberg M, Heyworth J, Pikora T

Low air, risk factors, recreational diving, scuba diving, epidemiology, research

2011;41(2):85-9.

Observation of increased venous gas emboli after wet dives compared to dry dives

Møllerløkken A, Breskovic T, Palada I, Valic Z, Dujic A, Brubakk AO

Bubbles, decompression sickness, diving tables, diving research

2011;41(3):124-8.

Risk factors and clinical outcome in military divers with neurological decompression sickness: influence of time to recompression

Blatteau J-E, Gempp E, Constantin P, Louge P

Military diving, decompression sickness, hyperbaric oxygen therapy, recompression, outcome, treatment, sequelae

2011;41(3):129-34.

Retinal artery occlusion: visual outcome after treatment with hyperbaric oxygen

Cope A, Eggert JV, O'Brien E

Retinal artery occlusion, hyperbaric oxygen therapy, outcome, case reports

2011;41(3):135-8.

The effect of pre-dive exercise timing, intensity and mode on post-decompression venous gas emboli

Jurd KM, Thacker JC, Seddon FM, Gennser M, Loveman GAM

Doppler, diving, exercise, bubbles, decompression illness

2011;41(4):183-8.

Telemedicine in the management of diving accidents: correlation of phone-assessed symptom severity with clinical findings

Wölfel C, Schüpfer G, Konrad C, Knessl P, Wendling J Diving accidents, decompression illness, clinical audit, underwater medicine

2011;41(4):189-94.

Effect of hyperbaric oxygen on bone healing after enucleation of mandibular cysts: a modified case-control study

Tripathi KK, Moorthy A, Ranjan CK, Rao G, Ghosh PC

Hyperbaric oxygen therapy, dental, radiological imaging, clinical audit, outcome

2011;41(4):195-201.

Oxygen toxicity seizures: 20 years' experience from a single hyperbaric unit

Banham NDG

Central nervous system, oxygen, toxicity, seizures, hyperbaric oxygen, hyperbaric oxygen therapy 2011;41(4):202-10.

The effects of increased pressure, variation in inspired gases and the use of a mask during dry chamber dives on salivary cortisol in professional divers

Tikkinen J, Hirvonen A, Parkkola K, Siimes MA Stress, endocrinology, hyperbaric oxygen, equipment, military diving, occupational diving, hyperbaric research 2011;41(4):211-15.

SHORT COMMUNICATION

Underwater working times in two groups of traditional apnea divers in Asia: the Ama and the Bajau

Schagatay E, Lodin-Sundström A, Abrahamsson E Breath-hold diving, freediving, spearfishing, performance, indigenous divers, diving research

2011;41(1):27-30.

Preliminary observations on the effect of hypoxic and hyperbaric stress on pulmonary gas exchange in breathhold divers

Garbella E, Piarulli A, Fornai E, Pingitore A, Prediletto R

Breath-hold diving, physiology, pulmonary function, pulmonary oedema, carbon monoxide, nitric oxide 2011;41(2);97-100.

TECHNICAL REPORTS

Solid-state electrolyte sensors for rebreathe applications: a preliminary investigation

Sieber A, Baumann R, Fasoulas S, Krozer A

Rebreathers/closed circuit, oxygen, carbon dioxide, transducer, capnography, helium, trimix

2011;41(2):90-6.

Maintenance of negative-pressure wound therapy while undergoing hyperbaric oxygen therapy

Chong SI, Tan MK, Liang W, Kim SJ, Soh CR Wounds, hyperbaric oxygen, treatment, equipment, safety 2011;41(3):147-50.

The influence of a hyperbaric environment and increased oxygen partial pressure on the corrosion of dental alloys

Mehl C, Heblich F, Lenz R, Ludwig K, Kern M

Diving, hyperbaric oxygen, nitrox, dental, teeth, hyperbaric research

2011;41(3):151-5.

Suitability of the partially implantable active middle-ear amplifier Vibrant Soundbridge® to hyperbaric exposure

Klingmann C, Klingmann A, Skevas T

Diving, implantable devices, hearing, equipment, pressure, barotrauma, performance

2011;41(4):229-32.

REVIEW ARTICLES

The need for optimisation of post-dive ultrasound monitoring to properly evaluate the evolution of venous gas emboli

Blogg SL, Gennser M

Diving, decompression, bubbles, Doppler, review article

2011;41(3):139-46.

Predicting performance in competitive apnea diving. Part III: depth

Schagatay E

Breath-hold diving, hypoxia, exercise, cardiovascular, respiratory, physiology, safety, review article 2011;41(4):216-28.

THE WORLD AS IT IS

British Sub-Aqua Club (BSAC) diving incidents report 2009

Compiled by Brian Cumming, Diving Incidents Advisor

Wilson CM

Recreational diving, accidents, diving deaths, abstracts 2011;41(1):36-7.

British Sub-Aqua Club (BSAC) diving incidents report 2010

Compiled by Brian Cumming, Diving Incidents Advisor

Wilson CM

Recreational diving, accidents, diving deaths, abstracts 2011;41(3):156-7.

THE DIVING DOCTOR'S DIARY

Cerebral arterial gas embolism with delayed treatment and a fatal outcome in a 14-year-old diver

Lippmann J, Fock A, Arulanandam S

Case reports, cerebral arterial gas embolism, deaths, children, recreational diving, fitness to dive, medical conditions and problems

2011;41(1):31-4.

Commentary on the problems of diving in remote areas and underdeveloped countries

Hawkins G

Diving accidents, legal and insurance, communication, DES – Diver Emergency Service, medicals – diving, tourism

2011;41(1):35.

ECHM WORKSHOP REPORT

Controversial issues in hyperbaric oxygen therapy: a European Committee for Hyperbaric Medicine Workshop

Kot J, Mathieu D

Hyperbaric oxygen therapy, bone necrosis, hypoxia, brain injury, autism, medical conditions and problems, clinical audit

2011;41(2):101-4.

LETTERS TO THE EDITOR

The death of buddy diving?

Cooper PD

Medicals – diving, buddies, diving deaths, legal, manslaughter

2011;41(1):38.

Women and pressure

Fife C, St Leger Dowse M

Women, diving, scuba diving, health, physiology, pregnancy, risk factors, letters (to the Editor)

Reply: Watterson J 2011;41(1):39.

The death of buddy diving?

Walpole B

Diving deaths, legal and insurance, letters (to the Editor)

2011;41(2):107.

Maligant otitis externa: experience with hyperbaric oxygen therapy

Ignatescu M.

2011;41(3):162.

Reply: Bennett M, Saxby A, James J

Hyperbaric oxygen therapy, malignant otitis externa, ENT, clinical audit, outcome, letters (to the Editor)

2011;41(3):162-3.

Advertising guidelines for *Diving and Hyperbaric Medicine*

Germonpré P, Bennett M

Policy, medical society, diving industry, hyperbaric medicine, letters (to the Editor)

2011;41(3):164.

Lithium batteries – intravenous infusion pumps used in hyperbaric facilities

Smart D, Van der Broek C

Equipment, hyperbaric facilities, safety, letters to the (to the Editor)

2011;41(3):165.

The death of buddy diving?

Cooper PD

Medicals - diving, buddies, diving deaths, legal and

insurance, letters (to the Editor) 2011;41(4):238.

FROM THE RECENT LITERATURE

Decompression illness

Vann RD, Butler FK, Mitchell SJ, Moon RE

Decompression sickness, decompression illness, arterial gas embolism, cerebral arterial gas embolism (CAGE), recompression, treatment, review article, reprinted from

2011;41(1):40.

Passive flooding of paranasal sinuses and middle ears as a method of equalisation in extreme breath-hold diving

Germonpré P, Balestra C, Musimu P

Breath-hold diving, ENT, ear barotrauma, abstracts, reprinted from

2011;41(1):40.

Comparison of two modes of delivery of first aid training including basic life support

Lippmann J, Livingston P, Craike MJ

First aid, resuscitation, training, World Wide Web

2011;41(2):106.

Interesting articles from the literature

2011;41(3):161.

BOOK AND JOURNAL REVIEWS

Masterminding wounds

(Strauss MB, editor, Miller SS, Aksenov IV, co-authors)

Germonpré P

Wounds, chronic wounds, textbook, book reviews 2011;41(1):41-2.

Dangerous marine animals: Mediterranean, Caribbean, Indo-Pacific

(Bergbauer M, Myers RF, Kirschner M, editors)

Meehan C

Marine animals, injuries, envenomation, toxins, first aid, general interest, book reviews

2011;41(1):42-3.

Diving pioneers and innovators, a series of in depth interviews

(Gilliam B, editor)

Goble S

Diving, general interest, book reviews

2011;41(1):43.

Hyperbaric nursing and wound care

(Larson-Lohr V, editor, Norvell H, Josefsen L, Wilcox J, co-editors)

Denny Y

Nursing, hyperbaric oxygen therapy, wounds, book reviews

2011:41(3):159.

Decompression illness, a simple guide and practical advice on the recognition, management and prevention of DCI

(Lippmann J, editor)

Edward R, Davis S

Decompression illness, recreation diving, first aid, hyperbaric facilities, general interest, book reviews 2011;41(4):234-5.

Wound care, certification study guide

(Shah J editor)

Denny Y

Nursing, wounds, book reviews

2011;41(4):235.

CONTINUING PROFESSIONAL DEVELOPMENT

CME activity 2011/1 Diver drug use and mental health Fabricus C

MOPS (maintenance of professional standards), diving, drugs, medications, mental health 2011;41(1):44-5.

CME Activity 2011/2 Acute carbon monoxide poisoning Mathieu D

MOPS (maintenance of professional standards), carbon monoxide, toxicicity, hyperbaric oxygen therapy 2011;41(3):160-1.

CME Activity 2011/4 Fluid balance in diving and divingrelated injury

Ross JAS

MOPS (maintenance of professional standards), decompression sickness, cerebral arterial gas embolism, endothelium, circulation, coagulation, resuscitation 2011;41(4):236-7.

CRITICAL APPRAISAL

Hyperbaric oxygen therapy improved both pain scores and range of motion in patients with early idiopathic femoral head necrosis (Ficat stage II)

Bennett M

Hyperbaric oxygen, bone necrosis, outcome, critical appraisal

2011;41(2):105.

Does hyperbaric oxygen administration decrease side effects and improve quality of life after pelvic irradiation?

Smart D

Hyperbaric oxygen, cancer, radiotherapy, side effects, soft-tissue radionecrosis, outcome, critical appraisal 2011;41(4):233-4.

SPUMS NOTICES and NEWS

South Pacific Underwater Medicine Society Diploma of Diving and Hyperbaric Medicine

Requirements for candidates (updated October 2008) Qualifications, underwater medicine, hyperbaric oxygen, research, medical society

2011;41(1):46.

Minutes of the Annual General Meeting of the Australian and New Zealand Hyperbaric Medicine Group, 09 September 2010, Crowne Plaza Hotel, Darwin

2011;41(1):49.

ANZCA Certificate in Diving and Hyperbaric Medicine 2011;41(1):52.

SPUMS website news

Hawkins G

World Wide Web, medical society

2011;41(2):110.

Minutes of the SPUMS Executive Committee Meeting 06 November 2010 at Prince of Wales Hospital, Sydney 2011;41(3):169-70.

Minutes of the Annual General Meeting of SPUMS held at The Hilton Hotel, Guam, on Thursday 27 May 2011 2011;41(3):170-5.

Rear Admiral Robyn Walker AM, RAN, MBBS, Dip DHM

2011;41(4):248.

Advertising in Diving and Hyperbaric Medicine 2011;41(4):249.

EUBS NOTICES and NEWS

EUBS Executive Committee (as of September 2010) 2011;41(1):53.

Minutes of the Executive Committee (ExCom) of EUBS Meeting, Gdansk Medical University, Gdansk, 26 August 2011

2011;41(4):242-4.

Minutes of the EUBS General Assembly Gdansk, 28 August 2011

2011;41(4):244-5.

THE POETRY DOCTOR

Amazing air

Parker J

2011;41(2):107.

Hyperbaric stress

Parker J

2011;41(4):250.

OBITUARY

Professor Christian J Lambertsen

Obituary, general interest, rebreathers/semi-closed circuit

2011;41(2):108.

William Brook Filer

2011;41(3):165.

R W 'Billy Bob' Hamilton 2011;41(4):239.

INSTRUCTIONS TO AUTHORS

Short version (updated November 2010)

2011:41(1):56.

Short version (updated December 2011)

2011;41(4):252.

Index to Diving and Hyperbaric Medicine for 2011, Volume 41	8
Diving and Humanharia Madiaina is indexed an MEDI INE. CaiCaanah® and Embass (Caana	
Diving and Hyperbaric Medicine is indexed on MEDLINE, SciSearch® and Embase/Scopu	JS
The	
Diving and Hyperbaric Medicine	
Journal website is at	
<www.dhmjournal.com></www.dhmjournal.com>	
Printed by Snap Printing, 166 Burwood Road, Hawthorn, Victoria 3122, hawthorn@snap.com.au	