treatments (i.e., that the dives may have been close to or exceeded recognised decompression limits). Where the study was limited, in this respect, is that cumulative nitrogen loading is a very blunt tool for evaluating these profiles. On-loading alone will always overestimate the effect of deep diving, as it ignores the benefits of staged decompression, and it will always underestimate the effects of rapid ascents, where on-loading ceases promptly. Preliminary results from an ongoing study have been reported elsewhere, whereby the nitrogen partial pressures from the incident profiles are modelled with three tissue compartments and with an ambient-to-compartment pressure component. This new approach of computing probabilistic decompression sickness (pDCS) should correct the limitations of the initial analyses within the context of presenting valid and comparable values for each type of profile.

It is accepted that the initial analyses ignored a lot of the clinical data available for the profiles that were examined. This is being addressed in the ongoing study employing probabilistic modelling. As well as comparing pDCS values against the eventual diagnosis, the ongoing study also takes into account the condition of the patient on presentation, the condition on discharge compared with that of presentation and the progression of symptoms. Although time to treatment will be considered, with the possibility of introducing a cut-off time, there is probably little merit in making any prolonged investigation of this feature with such a relatively low sample number. In any case, time to treatment is a multi-factorial dynamic in the management of diving casualties and, therefore, it is too simplistic for Medak et al to make any generic statements on the effect of delayed treatment and likelihood of recovery. Without wishing to get too tied up with what is a highly complex issue, any effects of delay on the eventual treatment will always be influenced by the minimum time delay for divers presenting with the most severe types of illness (i.e., the proximity of the treating facility to the patient catchment) as well as the severity of that illness. It is further complicated by the fact that the severity of illness may dictate the time to treatment through the instantaneous recognition of very obvious and measurable symptoms compared with a diver with minor, self-assessed symptoms. However, I accept that time to treatment itself may not be a very reliable indicator of the severity of presentation across different presenting groups and I agree, therefore, with Medak et al that further study should differentiate between cases of DCS and AGE.

It is reassuring to learn that Medak et al find merit in the general approach to investigating this interesting data set. I can assure them that additional work in this area is continuing and that their comments on the initial study will help influence that ongoing study. It will continue to be of interest to make quantitative assessments of the effects that specific profiles may have on eventual patient treatment and outcome. This is, after all, one of the few areas of medicine where the treating physician is presented with an actual record of the events that caused the patient’s illness. In addition, well-classified profiles from incidents of actual DCS that are collated by treating facilities could produce a data depository for use by developers of future decompression models.

References


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Time to change the Annual Scientific Meetings (ASMs)

Dear Editor,

I have just been reading the September 2005 issue of the *SPUMS Journal* and came across the 10 April Executive Committee Meeting minutes, specifically regarding the ASMs and the recent poor attendance.

Just to add my two cents’ worth, I agree that it is time to bring the Annual Scientific Meeting onshore, make it a more serious academic event and attach a separate dive trip. I have attended only the one ASM, in Fiji 2000, and I found it expensive, a poor dive trip because of having to cater for such numbers, a poor family trip because of the lectures in the afternoon and a poor academic meeting because the diving and socialising detracted from the meeting. I was too sleepy to concentrate on the talks, no doubt due to my ‘bubble load’!

Make it onshore, make it a quality meeting and I for one would attend regularly. As it stands, I would rather do my diving without getting lectured in the afternoon.

Can you canvas the membership on this?

Dr Richard “Harry” Harris
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PMB 9013, Pt Vila, Vanuatu

Key words
Medical society, meetings, letters (to the Editor)
Editor’s reply:

I thank Dr Harris for his thoughts on the Society’s ASMs. Their ‘traditional’ form of many years has been debated at Executive meetings on frequent occasions, whilst a survey of members some years ago gave minimal feedback! There was a lack of interest in ‘onshore’ meetings in the past, but times have changed. With the new website, another survey of members’ views is being seriously considered.

The day-to-day structure, combining diving with a four-hour meeting, is dictated largely by Australian members’ wishes to have the meeting fully tax-deductible; changing this would add to the cost. Despite my age, personally I find I cope well with this, provided I largely avoid the ‘socialising’ (a euphemism for late-night drinking?). This format is much the same as the winter ski conferences so popular in medical continuing education. Many colleagues and I prefer a meeting broken into discrete chunks, rather than sitting in a conference room all day for several days. Organising scientific meetings is expensive if you want good guest speakers and a well-organised trip, there is simply no way around this.

I am concerned at the comments on the scientific content of the meeting. The guest speaker at the 2000 ASM was David Elliott, always excellent, which is why we have invited him so often. Others included Des Gorman, Simon Mitchell, Robyn Walker, Paul Thomas, David Taylor, Mike Bennett, Malcolm Le May, Drew Richardson and Rees Jones. There were some good case-based discussions and a vigorous debate on fitness standards for diving. I have to disagree with Dr Harris on this. On one thing we do agree, the diving was mediocre that year, partly due to severe coral bleaching.

What SPUMS needs is ideas and solutions and for members to present their research at our Society meetings, not to publish elsewhere. I look forward to Dr Harris’s continued active participation in SPUMS in the future.

Diving-related fatalities resource

The coronial documents relating to diving fatalities in Australian waters up to and including 1998 have been deposited by Dr Douglas Walker for safe keeping in the National Library of Australia, Canberra. Accession number for the collection is: MS ACC 03/38.

These documents have been the basis for the series of reports previously printed in this Journal as Project Stickybeak. They are available free of charge to bona fide researchers attending the library in person, subject to an agreement regarding anonymity.

It is hoped that other researchers will similarly securely deposit documents relating to diving incidents when they have no further immediate need of them. Such documents can contain data of great value for subsequent research.

The poetry doctor

Have fun

I’d like to write a prescription
That’s never had bad side effects
To help stress of any description
To all races, classes and sex.

It’s totally free with no fault.
It’s simple for it will just say,
“Take life with a big pinch of salt
One, two, three, four times a day.”

For our lives are bustling with hustle,
Underpaid, overworked, overtaxed,
That stimulates spasm of muscle
Which is cured by being relaxed.

Yet I see tension headaches and chest pain,
Irritable bowel with diarrhoea,
Asthma, hypertension and migraine
Which out of the blue do appear.

These people all suffer from tension
Causing spasm that grips and deforms.
These symptoms enhance apprehension
So a downward spiral will form.

My prescription has numerous potions,
Any fun that will so entertain
Or humour dissolved in a lotion
To inject in a jocular vein.

So have fun on a daily basis,
Don’t be so serious and grim.
Have some daily “Red Faces”,
Act on a whisper or whim.

Be more spontaneous and hasty
Let gravity come to a halt.
Make your life far more tasty
By taking a big pinch of salt.

Christmas is a great opportunity to escape the seriousness of academia, research, teaching or clinical consultation and spend some quality time with family and friends, have fun and frivolity, relax and renew. Take this prescription home and take the full course over the holiday. Failure to complete the course may create a resistant strain (and stress).

John Parker
<www.the-poetry-doctor.com>
Book review

The ECHM Collection, Volume 2

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The ECHM Collection Volume 2 continues the fine concept and formatting established in the first volume. The ECHM series is a collection of the consensus meetings of the European Committee for Hyperbaric Medicine (ECHM). The current volume covers the 2000 to 2003 meetings, with the judge’s final consensus report of the fourth meeting (1998) on “HBO in the treatment of the diabetic foot”, which was omitted from the first volume.

The volume begins with the end report of the 4th ECHM congress and is followed by three sections based on the main topics of the concensus meetings:

The second section contains an interesting assessment of several pathologies in which hyperbaric oxygen therapy (HBOT) has been used for treatment, grouped as follows:
- new indications in infectious diseases
- new indications in oncology
- new indications in neurology
- other new indications.

The “New indications in infectious diseases” component mainly looks at conditions in which there is an obvious background to the efficacy of HBOT. It includes intracranial abscesses and anaerobic pleuro-pulmonary infections. Unfortunately, it is not a particularly broad review of the topic and consists mainly of a brief review of the mechanisms and then a report of a case series in each author’s facility. The section on oncology looks at HBOT in radio-sensitisation of neuroblastomas and late radiation enterocolitis, which are covered well and a better generalised argument for and against the use of HBOT is presented. The reviews on new indications in neurology cover cerebral palsy and stroke. Both look at the evidence well and explain clearly the problems in performing studies with these particular groups of patients with regards to getting appropriate unbiased outcome data. In the review of stroke, Marroni laments that there probably is a place for HBOT but because of the flawed methodological processes of the studies thus far no definitive statement can be made. There are promising case series for other indications (Crohn’s disease, sickle cell disease and retinits pigmentosa) that may show that HBOT is beneficial in these conditions but further evidence is required.

Section 3 is a much more revealing read. It works in the classical sense of a consensus meeting with a literature review, a basic studies review, clinical studies, then a jury report and consensus review and finally, and quite appropriately, a statement on the direction that future research should take.

The initial meeting is set up for a jury to answer six questions in an evidence-based medicine format. The opening review by Dr David Pasquier is one of the better ones that I have come across. It concentrates particularly on irradiated tissues of the head and neck, pelvis and CNS/peripheral nerves. He very comprehensively goes through all the evidence for the development and then treatment of these often debilitating side effects. The section on head and neck is extremely well done and the author obviously has a firm knowledge of both radiation oncology and treatment modalities for head and neck tumours and delayed radiation problems. The evidence for beneficial effects with other soft tissues with radiation-induced problems is a little less extensive. This is reflected in the shorter sections on these conditions, but nevertheless they are covered well.

The next monograph, on HBOT in radionecrosis, is less helpful. It consists of several tables of summaries of papers that have been published in radionecrosis and HBOT use. The main problem is that the selection of some of the papers seems somewhat “un-vetted” with papers with sample sizes of one and two patients sitting alongside papers with more appropriate sample sizes. Reviewing these papers in a more structured manner would have helped to establish numbers needed to treat, and better statistical analysis would make each paper’s contribution more relevant in the overall context of the other papers.

The following chapters provide some good data on the incidence of late radiation tissue damage as well as the pathophysiology behind the damage. They then look at the effects of HBOT on the damaged tissue with a particular emphasis on osteoradionecrosis and the potential effects of HBOT on the successful insertion of dental implants.

Part three of this section looks at soft-tissue radionecrosis. There seems to be a lot of repetition here with incidence statistics and the nature of treatments already covered in earlier papers, but this is the nature of the consensus format and putting these papers together with individual reviewers. The monograph by Feldmeier on the concern that HBOT may cause cancer development or growth is another piece of well-constructed work well worth reading.
The sixth consensus meeting is presented in Section 4 of the collection. It concentrates on the "Prevention of dysbaric injuries in diving and hyperbaric work". As with most of the consensus meetings there is an established set of five questions, which a jury answers based on presentations of the literature and known research. The first part of this section looks at the value of medical examinations for both recreational and commercial diving professionals. Tetzlaff presents an insightful monograph on the difference between compressed-air work and compressed-air diving. This raises the point as to whether compressed-air workers should be assessed in a different way to commercial divers and showed me personally how limited is the knowledge in this highly complex area of occupational assessment.

The next segment of this section looks at safety management in five different compressed-gas environments:

- professional divers
- compressed-air (non-diving) professionals
- scientific divers
- recreational divers
- hyperbaric therapy attendants.

Each section is presented by a professional safety expert in each of the disciplines and shows the very different concerns that occur with each type of compressed-gas environment.

The next two parts look at decompression modelling and the effects of decompression models on real-life situations. The final part looks at compressed-air workers (caissons and hyperbaric chambers) and whether they need specific safety procedures due to the difference in bubble formation theory compared with commercial divers. All of these arguments are presented clearly and coherently with a good jury summary at the end.

My overall opinion of this volume is that there is a much more clinical hyperbaric emphasis than the first volume, which mirrors the general trend away from diving into more clinical hyperbaric practice throughout the world. The fifth consensus meeting is the gem in this volume, looking at the effects of radiotherapy on the body and the potential benefits (and points at which there is no benefit) of HBOT.

As with the earlier volume, this is an academic book and not for the general reader interested in the field. By their nature, these collections are always going to be slightly out of date. This volume is a significant improvement on the first with better and clearer aims and a more rigorous application of evidence-based medicine in its evaluations. As for the first volume, my only criticism is that the lack of an index and the section division of the page numbers make it a little harder to navigate this book than it should be. A pleasing feature is an improvement in the graphs and diagrams compared with Volume 1, which are now clear and add to the text appropriately.

All in all, a valuable addition to any hyperbaric unit library with a pleasing European emphasis on the state of play of hyperbaric medicine.

Glen Hawkins
Hyperbaric Fellow, Prince of Wales Hospital, Sydney

Key words
Medical society, meetings, diving, decompression illness, safety, treatment, osteoradionecrosis, hyperbaric oxygen, book reviews

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**SPUMS Journal CD**

The SPUMS Journal, volumes 1-30, is available on CD.

To read and print these documents Adobe Acrobat Reader (version 3 or later) is required. This may be downloaded free of charge from the Adobe web site <www.adobe.com>.

The CD is available to members for Aust $25 (incl. GST or overseas mailing). The cost to non-members and institutions is Aust $90 inclusive.
Cheques or money orders should be made payable to: ‘South Pacific Underwater Medicine Society’. Credit card facilities are not available for this.

**Contact:** Steve Goble, Administrative Officer
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A new CD incorporating volumes 31-35 will be available in late 2006.