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Dr David H Elliott was one of the guest speakers at the SPUMS 1996 Annual Scientific Meeting. He is Co-Editor of The Physiology and Medicine of Diving, which was first published in 1969, with the most recent edition in 1993 and is also the Civilian Consultant in Diving Medicine to the Royal Navy. His address is 40 Petworth Road, Haslemere, Surrey GU27 2HX, United Kingdom. Fax + 44-1428-658-678. E-mail 106101.1722@compuserve.com .

ARTICLES OF INTEREST REPRINTED FROM OTHER JOURNALS**BUOYANCY****Key words**

Buoyancy, training, reprints.

Buoyancy control is one of the most important skills to master if your diving is to be safe, let alone comfortable or good for the environment. You may have been diving for quite a long time but are you diving at your correct buoyancy?

First you should plan your buoyancy and the extent to which you can change your buoyancy according to the type of dive. If you need to work on the bottom, carry out photography, dive with trainees or carry out decompression stops you may need to be able to adjust your buoyancy so

that you are a kilogram or two negative near the surface at the end of the dive as well as at any other time. But if you are carrying out a very standard "look and see" dive with no decompression then you need to be close to neutral buoyancy throughout the dive.

If you are negative you run the risks of

- 1 Uncontrolled descent into unintended depths
- 2 Stirring up the sea bed, which is bad for marine life and for visibility.
- 3 A reduced margin of safety if you need to ascend relatively rapidly, if you need to help another diver surface, or if you meet descending currents.

How do you achieve neutral buoyancy ? The very first piece of training comes in the pool when you demonstrate neutral buoyancy. Both instructors and

GLEANINGS FROM MEDICAL JOURNALS

The following articles have come to the notice of the editorial staff and these notes are printed to bring them to the attention of members of SPUMS. They are listed under various headings of interest to divers. Any reader who comes across an interesting article is requested to forward the reference to the Journal for inclusion in this column.

VALSALVA MANOEUVRE AND VITREOUS HAEMORRHAGE

Valsalva maneuver induced vitreous hemorrhage

Jones WL. *J Am Optometric Assoc* 1995; 66 (5); 301-304

Abstract

Background: A 43 year old male who performed a severe and sustained Valsalva manoeuvre developed a vitreous haemorrhage that was suspected as originating from an optic nerve vessel. Valsalva haemorrhagic retinopathy is not a common ocular finding and a breakthrough into the vitreous is even more uncommon. The vitreous haemorrhage cleared with recovery of previous acuity levels and a residual of small areas of fibrosis in the inferior vitreous. A discussion of the physiology of the Valsalva manoeuvre and of possible ocular and non-ocular complications is presented. There is also a discussion of how this manoeuvre is used in the diagnosis of orbital diseases.

Conclusion: In this case a vitreous haemorrhage was induced by a marked and sustained Valsalva manoeuvre which resolved without significant sequelae. The Valsalva manoeuvre is capable of causing many ocular complications; it is important to advise patients about the potential side effects of this manoeuvre.

Key Words

Reprint, Valsalva manoeuvre, vitreous haemorrhage.

ANXIETY AND PANIC IN DIVERS

Anxiety and Panic in Recreational Scuba Divers

Morgan WP. *Sports Med* 1995; 20 (6); 398-421.

Abstract

In the early 1980s it was estimated that 1 to 1.5 million Americans were involved in scuba diving as a form of recreation. While the number of active divers in the US remains a matter of controversy, the most recent estimate falls between 2.7 and 3.1 million.

Scuba diving is a high-risk sport; it is estimated that 3 to 9 deaths per 100 000 divers occur annually in the US alone, in addition to increasing numbers of cases of decompression illness each year. However, there has been a tendency within the diving community to de-emphasise the risks associated with scuba diving. While there are numerous factors responsible for the injuries and fatalities occurring in this sport, there is general consensus that many of these cases are caused by panic.

There has been a tendency to focus on variables such as age, diving experience, use of alcohol and drugs, and type of dive (e.g. cave, deep water, wreck) when looking at causes of diving fatalities. While the cause of death is listed as drowning in more than 60% of scuba diving fatalities, drowning is usually caused by specific problems such as: lack of air; entanglement in fishing nets, rope, or kelp; air embolism; narcosis and panic.

While 60% of diving fatalities can be attributed to medical, environmental or equipment problems, the remaining 40% are usually classified as unexplained or due to "undetermined" causes. However, there have been anecdotal reports of divers removing their regulators when exposed to stressors provoking anxiety and panic responses and reports of rapid ascents as a consequence of panic.

There is also evidence that individuals who are characterised by elevated levels of trait anxiety are more likely to have greater state anxiety responses when exposed to a stressor, and hence, this sub-group of the diving population is at an increased level of risk.

Panic behaviour represents one of the most significant problems confronting divers of all ages and both sexes. Panic is not restricted to beginning divers; competent divers with many years of experience report that they have experienced panic. Despite the fact that panic can be a significant problem in scuba diving, there has been a tendency for diving organisations to ignore this problem. Also, editors and authors of introductory scuba books have typically not included discussions of anxiety and panic. Indeed, there is a conspicuous absence of terms such as anxiety, panic, stress and fatalities in most of these publications.

Key Words

Panic, recreational diving, reprint.

TOURIST HEALTH

Tourist health services at tropical island resorts.

Wilks J, Walker S, Wood M, Nicol J and Oldenburg B. *Aust Health Rev* 1995; 18 (3): 45-62

Abstract

An unfamiliar holiday environment may give rise to a range of common and unique medical conditions and injuries. Based on a six-month retrospective analysis of clinic records, the present study reports a detailed profile of health services provided for guests at three tropical island tourist resorts. A total of 1183 clinic visits were analysed; 735 (62 per cent) concerned medical conditions, while 448 (38 per cent) were related to injuries. The most common medical conditions treated were respiratory, digestive, skin problems, eye disorders and genito-urinary complaints. Injuries included lacerations, bites and stings, sprains and fractures. Health services consisted mainly of medication, specialist nursing care and first aid. Study findings highlight the advantages of using an internationally accepted classification system for primary health research, and the critical role of the nurse in tourist health services.

Key Words

Health, tourism, reprint.

MARINE TOURISM

Remote nursing services at island tourist resorts.

Wilks J, Walker S, Wood M, Nicol J and Oldenburg B. *Aust J Rural Health* 1995; 3: 179-185

Abstract

Based on a 6 month retrospective analysis of clinic records, the present study reports a detailed profile of nursing services provided for guests at three tropical island tourist resorts. A total of 1,183 clinic visits were analysed, with presentations coded according to the International Classification of Primary Care (ICPC). The main reasons for presentation were skin problems, ear disorders, respiratory, digestive and musculoskeletal complaints. Health services consisted mainly of education, specialist nursing care and first aid. Study findings highlight the importance of using an internationally accepted classification system for primary health research and the critical role of the nurse in tourist health services.

Key words

Health, tourism, reprint.

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