



Australian Society of Dental Anaesthesiology

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Federal Council

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Links

<http://www.adsahome.org/>
The American Dental Society of Dental anaesthesiology's home page

<http://www.saaduk.org/>
The Society for the Advancement of Anaesthesia in Dentistry

<http://www.asdahq.org/>
The American Society of Dental Anaesthesiologists

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President's Message

Already we are well into 2009 and it will not be long before the IFDAS conference is upon us. Your ASDA council has been hard at work in order to ensure that we generate sufficient numbers to make this meeting financially viable and equally, to ensure that the contents of the various sessions are such that it has something for everyone. ASDA is a small society relative to some of the other IFDAS member societies and we really need the support of all Australian members to make this meeting a success.

Also of interest is the fact that we have some excellent pre-conference workshops – a number of Australian Dental Boards require annual or biennial continuing CPR training and these workshops offer a convenient opportunity to obtain the necessary certification as well as attend the conference over the following few days. Numbers for these workshops are limited, so please get in early. Remember, this conference is not limited to members only and if you have colleagues who would like to upgrade their emergency management skills, please encourage them to come along too.

I look forward to catching up with everyone in October.

Andr  Viljoen
President ASDA

From the Editor's Desk

I'm very keen to get contributions from members, please consider a case report or a topic of your interest, or perhaps even a question to the group. My email is peterfatouris@hotmail.com

Yours,
Ed.

IFDAS update

There are only 5 months to go for the IFDAS 2009 12th International Dental Congress on Modern Pain Control to be held on the Gold Coast from 14–17 October 2009. Visit our website and register now <http://www.ifdas2009.com/>

We have an exciting program for members with a strong interest from overseas presenters. The theme of the conference is "Towards Global Consensus On Pain Free Dentistry" with a special emphasis on sedation education, paediatric sedation, implants and sedation and, scientific updates. The keynote speakers are:

Dr. Stephen Wilson, Professor and Director of the Division of Dentistry at Cincinnati Children's Hospital Medical Centre. Dr. Wilson's research interests include child behaviour in the dental clinic, conscious sedation for children, and electronic monitoring during sedation.

Dr. John Meechan, Senior Lecturer and honorary consultant in Oral Surgery at Newcastle University, United Kingdom, the recipient of a Distinguished Scientist Award from the IADR and a King James IV Professorship from the Royal College of Surgeons of Edinburgh.

Dr Ken Harrison is a consultant anaesthetist in Sydney at Westmead and Liverpool Hospitals and is a senior clinical lecturer with Sydney University. He is also a senior

retrievalist the manager of Education and Disasters with Careflight and is one of the deputy directors of the Medical Retrieval Unit of the ASNSW
Plus there are a number of well known speakers for USA, Germany, UK, Italy, Brazil and Australia.

Members are reminded of a few important dates coming up:

Call for Papers is now open and closes on the 1st June

Early Bird registration, with substantial discounts for members too, closes on the 1st June.

Members are also reminded that there are a number of important workshops that will be held in conjunction with the Conference:

Medical Emergencies in the Dental Surgery for the Sedationists - Wed 14 Oct. This a fully accredited workshop and meets the requirements of both the Queensland and NSW Dental Boards. There are limited opportunities to participate in these courses and that it is mandatory to attend one of these courses every 2 or 5 years depending on your State.

Teamwork in Dental Sedation. This is a fully accredited course for dental practitioners and dental assistants involved in conscious sedation in their dental practice. The repeated half day course will be conducted by Rachel Ma, Clinical Lecturer of the Faculty of Dentistry, University of Sydney, Clinical Nurse Specialist, Sedation and Pain Control, Westmead Hospital. The topics will cover how teamwork can be built up in dental sedation settings, knowledge of basic airway management and perioperative patient monitoring, plus how to assist in medical emergencies.

Additionally, there are workshops for the general dentist:

Medical Emergencies in the Dental Surgery for Dentists Practicing Sedation and

This is a must for every dentists and sure to be popular – so get the word and finger out

Relative Analgesia or Nitrous Oxide Inhalation Sedation

So if you have a colleague/s who you feel would benefit from these please let them know as

Registration for the Workshops are now open

And again there are discounts for members.

Don't miss this opportunity to attend the premier international conference on sedation and pain control on your doorstep.

Treasurer's travails

In late April I had the pleasure of attending the annual meeting of the American Dental Society of Anesthesiology (ADSA) in Chicago. It was a very interesting two and a half day meeting entitled "The Evidence Based Approach To Anxiety And Pain Control". The principal themes of the meeting could be summed up in two of the presentation titles: "Finding, Evaluating and Applying Clinical Information in a Google-Dominated World" and "Applying Evidenced Based Decision-Making in Outpatient Anaesthesia".

The first theme dealt with how we evaluate the validity of the vast volume of information which is now so readily available through the Internet. It became very clear that we cannot rely too heavily on the summary of research presented, but must review the protocols used in the study. Was it a random sample? Was there a placebo group? Was it a blind or double-blind study? The importance of meta-analysis and systemic reviews was emphasised, as well as the Cochrane collaboration.

The theme dealing with anaesthesia in outpatient dentistry was relatively less applicable to the Australian scene, but interesting presentations on cardiovascular assessment, evidenced based decision-making, and the rationale of the drugs used in sedation and anaesthesia were extensively covered.

As always, the hospitality of the ADSA was outstanding, as was the friendship offered by the members attending the conference. Part of my task during this visit was to encourage as many of their members as possible to attend the IFDAS meeting to be held on the

Gold Coast in October of this year. It was not difficult to sell the idea of a holiday in such a desirable area, particularly as this will coincide with the onset of winter in the northern hemisphere. Many delegates remarked that they had been intending to visit Australia for years, and it was not difficult to persuade them that this was the year when fares have never been cheaper and the American dollar is still strong in our country.

I hope to see all of you at the IFDAS meeting in October! Please don't leave it to the last-minute to make your booking; if any of you have been involved in arranging meetings you'll appreciate just how difficult this makes it for the organising committee. Not only that, but your Australian society has had to foot a very considerable bill for the required deposits and this has depleted our reserves significantly. Only with your wholehearted support will this meeting be the success that it deserves to be, and we need you all there to fly the flag and show our overseas colleagues what a great bunch of fellows we are.

See you on the Gold Coast in October!

James Auld.

Q & A (or try this quick quiz.....) by Dr Jeff Field

For our Q&A this issue let's look at anaphylaxis and anaphylactoid reactions. Next issue we will focus on treatment of anaphylaxis.

- 1) Define anaphylaxis, and anaphylactoid reactions.
- 2) True or false: the treatment for each is different.
- 3) As dentists working in the field of sedation/anesthesia what agents that we commonly use have the ability to trigger anaphylaxis.
- 4) What class of agents used in general anesthesia but not in sedation account for most of the cases of anaphylaxis under general anesthesia
- 5) What is the effect of dose and route of drug administration on the severity of the anaphylactic reaction.
- 6) There are classically 4 mechanisms of drug allergy (Coombs classification). Describe each mechanism.

Westmead's basic referral criteria for dental IV sedation

No, I don't have Alzheimers, or at least I can't recall if I do, but I thought this was worthy of a reprint from last edition. Ed.

Behavioural

- Cooperative in the dental chair
- Tolerant of blood tests/ cannulation without undue restraint
- No aggressive / violent / behavioural issues
- No psychiatric/ mood disorders

Medical

- Age between 8 - 70 years old
- Adequate venous access
- No excessive scoliosis/ kyphosis
- No severe disability preventing adequate venous access
- No significant respiratory diseases or sleep apnoea
- No dysphagia
- Not obese leading to difficult airway management in a supine position
- No Type I DM, poorly controlled epilepsy/ asthma/ reflux
- Not in pregnancy

Dental

- Basic dental treatment



Except for experienced operators, otherwise:

- No cementation of posterior onlays/ stainless steel crowns
- No crown and bridge
- No extensive endodontics

Q & A: Answers

A1 Anaphylaxis is an IgE mediated reaction leading to mast cell and basophil degranulation and the release of histamine as well as other agents . Plasma cells produce IgE antibodies on first exposure to a foreign antigen. The IgE then binds to the surface receptors on mast cells. On a new exposure, the IgE antibodies are crosslinked by the foreign antigen, causing the mast cells to release histamine and arachidonic acid metabolites leading to increased vascular permeability, vasodilation, and bronchoconstriction.

Anaphylactoid reactions are non IgE mediated reactions that act directly to cause mast cell and basophil degranulation. That is the drug in question directly acts on the mast cell and basophils. So anaphylaxis requires a previous exposure to the drug whereas anyphylactoid reactions require no previous exposure to occur. However the symptoms are exactly the same and are indistinguishable clinically.

The two can be distinguished by laboratory testing for IgE antibodies, serum tryptase (an enzyme released during mast cell degranulation) ,C3 and C4 complement and histamine which are elevated during anaphylaxis only. These tests must be done immediately as these all these parameters return to baseline within 4 hours.

A2 False, the treatment is exactly the same for both.

A3 The medications we use that can cause anaphylactic reactions are as follows:

- antibiotics
- local anesthetics
- opioids
- propofol
- benzodiazepines
- the other most likely cause of anaphylactic reactions during dental treatment is of course a latex allergy.

A4 The class of drugs used in general anesthesia that account for 60-70% cases of anaphylaxis are the muscle relaxants.

A5 Anaphylaxis is not dose related but route of administration will affect the severity of the reaction. Drugs given intravenously will cause a bigger reaction than drugs given by other routes of administration.

A6 The Coombs' classification divides drug allergies into four different types:

Type I is an immediate hypersensitivity reaction that is IgE mediated. This is what we know as anaphylaxis. Presentations include tachycardia , severe hypotension ,bronchospasm urticaria, angioedema.

Type II is a cytotoxic reaction that is IgG and IgM mediated, and examples include cytopenia and vasculitis.

Type III is an immune complex mediated reaction via IgG and IgM antibodies, and examples include serum sickness and vasculitis.

Type IV is a lymphocyte mediated reaction such as contact dermatitis.
