



# NEWSLETTER

## Australian Resuscitation Council

November 2006

Vol 30 No. 3

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### 2007 SPARK OF LIFE CONFERENCE

**E**verything is in readiness for another successful conference in April 2007. I'm sure that Conrad Jupiters on the Gold Coast will be an excellent venue and would be a great location for that family holiday which you have been putting off!

**C**losing date for submission of abstracts and poster presentations is 22<sup>nd</sup> January 2007. Full details are included in the registration brochure which can be obtained from the ARC office or downloaded from the ARC website. [www.resus.org.au](http://www.resus.org.au)

#### INTERNATIONAL KEYNOTE SPEAKERS

Jerry Nolan (UK)  
Mary Fran Hazinski (USA)  
Karl Kern (USA)  
Ola Didrik Saugstad (Oslo, Norway)

#### AUSTRALIAN VISITOR

Vic Callanan (Qld)

**I**f you haven't already registered, please do so asap.

## FIRST-AID FOR PHYSALIA (Blue-bottle) STINGS

The ARC is presently evaluating published evidence for the use of hot water for pain relief of stings caused by the Bluebottle and Portuguese Man-o'-War (*Physalia* spp) jellyfish.

So far a library of 128 articles has been compiled with 87 thought to be relevant to the subject. Thirty two of these have been cited in a draft worksheet of evidence evaluation and another 8 included in the bibliography of that worksheet as items of interest. An updated guideline will be issued early in 2007 and the worksheet detailing the evidence and its evaluation will be available on the ARC website for inspection.

### CHOKING (ARC Guideline 4)

Guideline 4 outlines the recommended procedure for choking. This is a controversial area mainly as there is a lack of any scientific evidence for making strong clinical guideline recommendations. The Consensus of Resuscitation Science identified that the combination of back blows, chest thrusts and abdominal thrusts could be used to relieve complete foreign body airway obstruction. Where the patient is unconscious then CPR should be used.

It is the use of the chest thrust which appears to be causing some confusion. Chest thrusts are applied:

- At the same point on the chest that is used when providing chest compressions during CPR.
- They are delivered sharper and slower than chest compressions during CPR.

In order to do chest thrusts you need to have the back of the patient supported. This can be achieved by either:

- Placing your other hand on the patients back.
- If the patient is sitting use your other hand to support the back of the chair.

- Have someone stand behind to provide support.
- Stand against a firm surface like a wall.
- Lie the patient down.

It is very hard to state categorically on how to achieve back support when using chest thrusts but the overall principle remains the same. Support the back any way you can.

Remember if chest thrusts cannot be applied continue with back blows. If the patient becomes unconscious commence CPR. The ARC does not recommend the use of abdominal thrusts as there is considerable evidence of harm caused by this procedure. For those interested there are two evidence based worksheets under Basic Life Support on the website [www.c2005.org](http://www.c2005.org)

The ARC has been made aware of a recent successful outcome in choking victim following the use of the chest thrust.

### BLS FOR ALS PROVIDERS

Readers will be aware that there is increasing evidence to support the importance of good quality CPR during resuscitation. There have been a number of published studies that show health care professionals - both in hospital and out of hospital - often over ventilate patients during CPR and provide too shallow chest compressions.<sup>(1, 2)</sup> A further study indicates that the probability of Return of Spontaneous Circulation (ROSC) rapidly diminishes as the duration of interruptions to chest compressions increases.<sup>(3)</sup> In this study the probability of ROSC fell from 50% to 25% when there were interruptions of only 5 seconds. With interruptions of 20 seconds the probability of ROSC fell below 10%.

In a more recent paper published in November 2006: In this prospective multi-centre in and out of hospital observational study, as the duration of the pause in chest compressions prior to defibrillation increased the chance of ROSC decreased.

**F**or every 5 second decrease in the pre-shock pause the chance of ROSC increased by 86%. Further the investigators noted that for every 5mm increase in the depth of compressions the chance of ROSC increased by 99%.<sup>(4)</sup>

**A**ll these studies involve health professionals in and out of hospital who are providing CPR in addition to advanced life support (ALS). They are important in that they provide further evidence of the importance of providing good quality CPR during ALS and its potential effects on survival.

1. Wik L, Kramer-Johansen J, Myklebust H, Sorebo H, Svensson L, Fellows B, et al. Quality of cardiopulmonary resuscitation during out-of-hospital cardiac arrest. *Jama*. 2005 Jan 19;293(3):299-304.
2. Abella BS, Alvarado JP, Myklebust H, Edelson DP, Barry A, O'Hearn N, et al. Quality of cardiopulmonary resuscitation during in-hospital cardiac arrest. *Jama*. 2005 Jan 19;293(3):305-10.
3. Eftestol T, Sunde K, Steen PA. Effects of interrupting precordial compressions on the calculated probability of defibrillation success during out-of-hospital cardiac arrest. *Circulation*. 2002;105:2270-2273.
4. Edelson DP, Abella BS, Kramer-Johansen J, Wik L, Myklebust H, Barry AM, et al. Effects of compression depth and pre-shock pauses predict defibrillation failure during cardiac arrest. *Resuscitation*. 2006 Nov;71(2):137-45.

### **NEW CPR GUIDELINES ARE BEST PRACTICE**

**T**he following article was published in the Surf Life Saving, New South Wales Newsletter, Issue 7 September-October 2006:

*Beaches will be even safer this summer as a result of the country's active surf lifesavers upgrading their training in cardio pulmonary resuscitation (CPR) to international best practice. The new CPR guidelines simplify previous methods, which varied depending on how many people were available to provide CPR, the age of the patient and a number of other variables. Although simpler, the new guidelines require one of the biggest re-training of Australia's surf lifesavers in the last decade.*

*SLSA's Medical Advisor, Dr Natalie Hood, said that SLSA uses medical, resuscitation and first aid techniques endorsed only by the Australian Resuscitation Council (ARC) – the peak authority for medical and first aid practices in Australia.*

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*"Having been Surf Life Saving's representative on the ARC for nearly two years and at the forefront of reviewing the international resuscitation guidelines and the evidence behind them, I strongly support the changes," she said.*

*In response to isolated concerns from some quarters that checking the pulse is no longer part of the CPR procedure, Dr Hood said that there is good evidence that those not dealing with cardiac arrest victims on a daily basis are very poor at detecting the presence or absence of a pulse.*

*"Studies involving doctors and nurses in emergency departments showed that they were unreliable and pulse checks in the back of noisy, vibrating ambulances are even harder," Dr Hood said. "First responders, such as surf lifesavers and lifeguards, along with the lay community first aid provider, have even less experience with cardiac arrest victims and by following the new guidelines will perform full resuscitation, with chest compressions on all patients without signs of life.*

*"The risks of performing chest compressions on patients with beating hearts is very low and the possible injuries such as broken ribs are minor compared with incorrectly withholding chest compressions - the outcome in that case is death.*

*"The scientific evidence that chest compressions on a beating heart could cause a malfunction of rhythm and potentially death is just not there.*

*"The long-held recommended treatment for patients with hearts beating too slow or too weakly has always been chest compressions by medical personnel, and this has never been a problem.*

*"The new guidelines just extend this to all patients without signs of life," she said.*

*Dr Hood said that the new recommendations are not just for ease of teaching lay community first aid providers, as they apply to doctors, nurses and ambulance officers alike and have been welcomed by all representatives on the ARC.*

*"Those critical of the new techniques most likely have not read the international evidence nor had the opportunity to debate the changes with some one who has," Dr Hood concluded.*

Reproduced courtesy of Surf Life Saving, New South Wales.

#### **Contact details for the ARC National Office:**

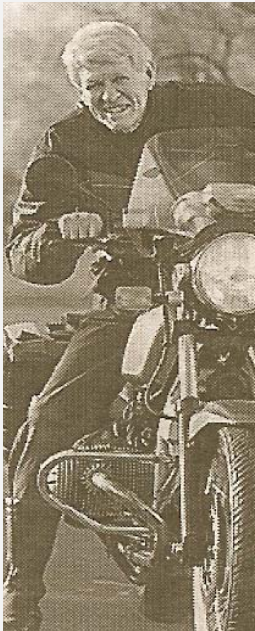
Mrs Carol Carey, Executive Officer  
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Vic 3000 Tel: (03) 9249 1214 Fax: (03) 9249 1216  
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## DOCTOR'S TONIC FOR THE AGEING

**E**vergreen South Australian doctor John Williamson is a pin-up boy at the age of 70!

**T**he retired anaesthetist, who now researches patient safety, has been selected to appear in the Still Inspiring calendar, celebrating the achievements of older Australians. The Calendar was launched by Minister for Ageing in Queensland on the National Day for Older Australians.

**D**r Williamson has lived in SA since 1990. He has been honoured with Membership of the Order of Australia (AM) for his work in diving and hyperbaric medicine and as a volunteer with St John Ambulance and Surf Life Saving. Dr Williamson was the St John Ambulance representative on Council from 1991-1997.



## **COUNCIL REPRESENTATIVES 2006**



**Back Row L-R:** Dr Malcolm Anderson (Chairman Tasmanian Branch), Dr Darren Walters (Cardiac Society of Aust & NZ), Ms Carol Cunningham (National Heart Foundation), Dr Chris Hogan (RACGP)

**Third Row L-R:** Mr Tony Walker (Chairman Vic Branch), A/Prof Jeff Wassertheil (A'asian College for Emergency Medicine), Mr Peter Mckie (Chairman NSW Branch), Dr Hugh Grantham (Chairman SA Branch/Convention of Ambulance Authorities), Dr Michael Parr (ANZ College of Anaesthetists)

**Second Row L-R:** Prof John Pearn (Royal Life Saving Society), Dr Natalie Hood (Surf Life Saving Aust), Mr Steve Dean (Chairman Qld Branch), Ms Natalie Ashcroft (Royal College of Nursing), Dr George Merridew (ANZ College of Anaesthetists), Mr Frank Bridgewater (Royal A'asian College of Surgeons)

**Front Row L-R:** A/Prof Jim Tibballs (Division of Paediatrics, RACP), Mr John Hall (Aust College of Ambulance Professionals), A/Prof Ian Jacobs (ARC National Chairman/Chairman WA Branch), Ms Jennifer Dennett (Aust College of Critical Care Nurses), Mrs Carol Carey (ARC Executive Officer), Dr Peter Morley (ARC Deputy Chairman/Aust & NZ Intensive Care Society)

**Absent:** Prof Colin Morley (Neonatologist/Co-opted member), Mr Glenn Peddey (Aust Red Cross), Dr David Scott (Aust Defence Force), Dr Peter Warfe (St John Ambulance)

**NEWSLETTER EDITOR  
MRS CAROL CAREY**



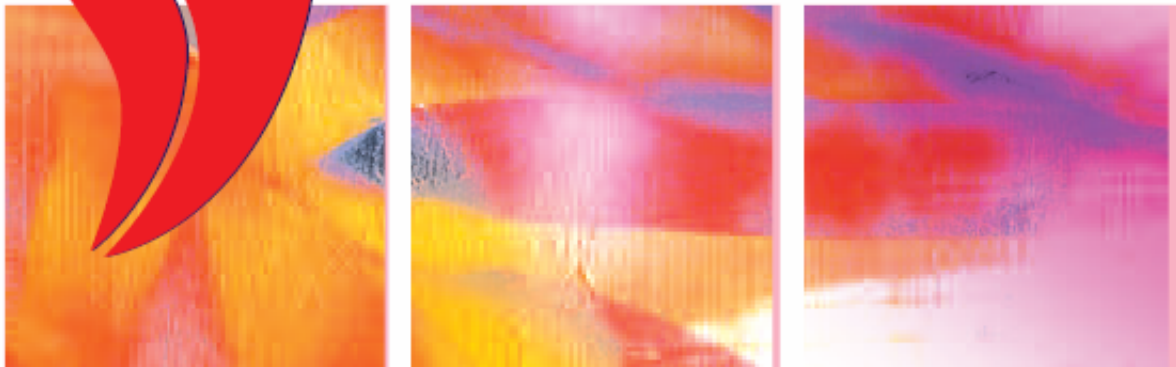
**MERRY CHRISTMAS & A HAPPY NEW YEAR**



## IMPROVING THE ODDS

Sixth "Spark Of Life" International  
Resuscitation Conference  
26-28 April 2007

Neonatal Satellite Meeting Thursday April 26 2007  
Improving the Odds for Babies



Conrad Jupiters  
Gold Coast, Queensland

The Conference Registration brochure can  
be downloaded from the ARC website [www.resus.org.au](http://www.resus.org.au)  
Further details:

Mrs Carol Carey, Conference Convenor,  
Australian Resuscitation Council,  
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Tel: (03) 9249 1214  
Email: [carol.carey@surgeons.org](mailto:carol.carey@surgeons.org)



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## ANNUAL SCIENTIFIC MEETING – MAY 2007

The Australian and New Zealand College of Anaesthetists, Faculty of Pain Medicine and the Joint Faculty of Intensive Care Medicine would like to invite you to the 2007 Annual Scientific Meeting to be held at the Melbourne Exhibition and Convention Centre from 26 – 29 May.

The theme of the meeting is "Perioperative Medicine: Evidence and Practice" which covers all aspects of pain medicine and anaesthesia, from pre-operative preparation, intra-operative management to post-operative care with an emphasis on best practice from available evidence. Professor Bruce Spiess, Professor Alan Merry, Professor Martin Koltzenberg and Dr Dan Sessler will join renowned national and local speakers to deliver this exciting program.

Please note the important key dates:

- \* October 2007 - online call for abstracts opens
- \* January 2007 - registration opens
- \* 20 February 2007 – deadline for receipt of abstracts
- \* 31 March 2007 – early bird registration closes
- \* 26 – 29 May 2007 – ANZCA ASM 2007

If you would like further information please visit the Annual Scientific Meeting website at <http://www.anzca2007asm.com/index.php>



**EMERGENCY MEDICINE IN THE DEVELOPING WORLD**  
Thursday 4<sup>th</sup> to Saturday 6<sup>th</sup> October 2007  
Cape Sun Hotel, Cape Town, South Africa

**KEY SPEAKERS**  
Dr Silvio Aguilera, Argentina; Prof Billy Selve, Papua New Guinea;  
Prof Elizabeth Molyneaux, Malawi; Prof Suresh David, India; Prof Owen Lewis, Nepal;  
Prof Chris Curry, Australia; Prof Jerome Hoffman, USA; Dr Amul Mattu, USA;  
Dr Bob Corder, USA; Prof Ken Boffard, South Africa

**TOPICS**  
All aspects of emergency medicine will be addressed as they apply to Developing World countries. Key addresses include:  
Pre-Hospital and Disaster Medicine; Application of evidence based medicine in the ED; Triage; The paediatric airway; Non-accidental injury; Paediatric radiology; Staffing levels for EDs and clinics; Resource allocation; Training of staff; Development of a research agenda; Quality management in the ED; Operational standards for EDs

**Workshops include:**  
Non Invasive Ventilation in the ED; Disaster planning; Ultrasound in the ED; Resuscitation updates

**CPD**  
This conference will be CPD accredited

**WEBSITE**  
Please see [www.emssa2007.co.za](http://www.emssa2007.co.za)

**FURTHER INFORMATION & ENQUIRIES:**  
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