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TITLE: Wolf Creek VI Conference on Cardiopulmonary Resuscitation

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Palm Springs, California 92262

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The views, opinions and/or findings contained in this report are
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designated by other documentation.
The Sixth Wolf-Creek Conference was held at the Ritz Carlton Hotel in Rancho Mirage from June 4, 2001 to June 7, 2001. Approximately 70 internationally renowned experts on Cardiopulmonary Resuscitation attended the Conference and presented their most recent research findings. Four Army Medical officers attended and observed the Conference. The experts specifically focused on issues of optimizing waveforms and emergencies for defibrillation, mechanical options for improving blood flow during cardiac arrest, more optimal vasopressor interventions during CPR, myocardial and cerebral preservation during CPR, and outcome measurements. The proceedings of the Conference will be published in a *Supplement of the Journal of Critical Care Medicine*.
The Sixth

Wolf Creek Conference on

Cardiopulmonary Resuscitation

June 4 – June 7, 2001
Ritz Carlton Hotel
Rancho Mirage, California
The Wolf Creek Conference
On
Cardiopulmonary Resuscitation

The so-called Wolf Creek Conferences of CPR researchers were initiated by Doctors James Elam, James Jude, and Peter Safar. The objective was to improve the clinical practices of cardiopulmonary resuscitation by stimulating laboratory and clinical research. There was great need of objective data such that guidelines on resuscitation might be secure. The first meeting of some 10 investigators was hosted in 1975 by Dr. James Jude at his “Wolf Creek Lodge” in Georgia. The proceedings were published by Doctors Safar and Elam as part of a monograph entitled Advances in CPR by Springer-Verlag in 1977. The second meeting occurred approximately five years later. It was chaired by the late Dr. Joseph Redding. The proceedings appeared in Critical Care Medicine in 1981. The third was held approximately five years later and it was organized by Doctors Nicholas Bircher, Mickey Eisenberg and Charles Otto. The Fourth Wolf Creek Conference was held in Palm Springs, California in September 1996 convened by The Institute of Critical Care Medicine under the chairmanship of Dr. Max Harry Weil. The proceedings were published in New Horizon. The Fifth Conference was in Rancho Mirage, in June 1998 at the Ritz Carlton Hotel. The proceedings were published as a Supplement to Critical Care Medicine.

This will be the sixth of these expert conferences. The initial objective of these conferences was at least partially accomplished, and the field of resuscitation science has grown impressively. New capabilities for cardiac resuscitation with newer waveform automated external defibrillators greatly expanded capabilities for defibrillation. A number of new mechanical compression-decompression methodologies have emerged. The futility of the pulse check, the limitations of currently used vasopressor agents and anti-arrhythmic drugs, and the decreased emphasis on ventilation in settings of dysrhythmic cardiac arrest have been demonstrated. Increasingly larger emphasis on resuscitation research has prompted more vigorous clinical, laboratory, and bioengineering research more recently sparked by the impetus of the PULSE Consortium. It is, therefore, timely that another Wolf Creek Conference be held for exchanges between active research workers on CPR. Once again, we anticipate publication of the proceedings as a Supplement to Critical Care Medicine.
WOLF CREEK VI

Monday, June 4, 2001

6:30 PM  Informal Dinner on Arrival

Tuesday, June 5, 2001

7:00 – 7:45 A.M.  Breakfast

7:45 – 7:55 A.M.  MH Weil and W Tang
Welcome and Introduction

SESSION 1  DEFIBRILLATION

8:00 – 8:10 A.M.  R. Kerber
Beyond Biphasic Defibrillation Waveforms

8:15 – 8:25 A.M.  R. Ideker
Efficacy of Defibrillation for Spontaneous and Electrically Induced VF

8:30 – 8:40 A.M.  H. Halperin
Defibrillation After Prolonged Cardiac Arrest

8:45 – 8:55 A.M.  J. Jones/O. Tovar
Electromechanical Deterioration of Ventricular Function During VF
9:00 – 9:10 A.M.  D. Jorgenson  
Adapting Current AEDs for CPR on Children and Infants

9:15 – 9:25 A.M.  W. Tang  
Pharmacological Defibrillation

9:30 – 9:40 A.M.  F. Sterz  
Recurrent Cardiac Arrest in 360 Survivors

9:45 – 10:15 A.M.  Coffee Break

10:15 – 10:25 A.M.  G. Nichol  
Cost-Effectiveness of Early Defibrillation by Non-Traditional Responders to Out-of-Hospital Cardiac Arrest

10:30 – 10:40 A.M.  J. Stothert  
Prehospital Cardiac Arrest and The Low Energy Rectilinear Biphasic Waveform

10:45 A.M. – 12:15 P.M. PANEL I

OPTIMIZING WAVEFORMS AND ENERGIES FOR DEFIBRILLATION

R. White, R. Kerber (Moderators)  
G. Bardy, R. Ideker, J. Jones, C. Morgan, D. Snyder, and O. Tovar.

12:15 – 1:30 P.M.  Lunch

SESSION 2  MECHANICAL INTERVENTIONS

1:30 – 1:40 P.M.  R. Berg  
Adverse Effects of Interrupting Chest Compression
1:45 – 1:55 P.M.      J. Bisera
A Protective Device For Uninterrupted
Precordial Compression

2:00 – 2:10 P.M.      K. Kern
Optimizing Compression/Ventilation Ratios.

2:15 – 2:25 P.M.      MH Weil
Expanding AEDs to Include Automated Detection of
Cardiac, Respiratory, or Cardiorespiratory Arrest

2:30 – 2:40 P.M.      K. Lurie
The Critical Role of Ventricular Preload
During CPR

2:45 – 2:55 P.M.      V. Nadkarni
Liquid Ventilation in a Pediatric Model

3:00 – 3:10 P.M.      C. Young
A Portable Device for Uninterrupted
Chest Compression

3:10 – 3:40 P.M.      Break

3:40 – 5:10 P.M.      PANEL II

MECHANICAL OPTIONS FOR IMPROVING
BLOOD FLOW

G. Ewy, H. Halperin (Moderators)
R. Berg, J. Bisera, K. Kern, K. Lurie, and V. Nadkarni

5:10 P.M.      Dinner
PANEL III

OPTIMIZING AIRWAY MANAGEMENT AND MECHANICAL VENTILATION DURING CPR

P. Safar, R. Berg (Moderators)
L. Becker, N. Chandra-Strobos, A. Idris, K. Kern, and N. Paradis

Wednesday, June 6, 2001

7:00 – 8:00 A.M. Breakfast

SESSION 3: PHARMACOLOGICAL INTERVENTIONS

8:00 – 8:10 A.M. N. Paradis
Revisiting High-Dose Epinephrine for the Management of Human Cardiac Arrest

8:15 – 8:25 A.M. W. Tang
Selective $\alpha_2$ Adrenergic Vasopressor Agents for CPR

8:30 – 8:40 A.M. V. Wenzel
Observations on the Effects of Vasopressin in Human Victims of Cardiac Arrest

8:45 – 8:55 A.M. R. Svedjeholm
Role of Intravenous Glutamate for CPR

9:00 – 9:30 A.M. Break
9:30 – 11:00 A.M.  PANEL IV

MORE OPTIMAL VASOPRESSOR INTERVENTIONS DURING CPR

G. Ewy, C. Otto (Moderators)

11:00 – 11:45 A.M.  FREE DISCUSSION
MH Well and W. Tang (Moderators)

11:45 A.M. – 1:15 P.M  Lunch

SESSION 4:  MYOCARDIAL PRESERVATION

1:15 – 1:25 P.M.  W. Tang
Myocardial Hibernation During CPR

1:30 – 1:40 P.M.  R. Gazmuri
Sodium Hydrogen Exchange Inhibitor for Minimizing Post-Resuscitation Myocardial Dysfunction

1:45 – 1:55 P.M.  A. Idris
Oxidant Injury After Cardiac Arrest and Reperfusion

2:00 – 2:10 P.M.  L. Becker
Inducing Hypothermia: Cellular Rationale and Potential Clinical Method

2:15 – 2:25 P.M.  T. Vanden Hoek
Post-Resuscitation Oxidant Injury in Cardiomyocytes due to RAC1 NADH Oxidase

2:30 – 3:00 P.M.  Break
3:00 – 4:30 P.M.  PANEL V

MECHANISMS AND MANAGEMENT OF POST-RESUSCITATION MYOCARDIAL DYSFUNCTION

G. Sopko, MH. Weil (Moderators)

SESSION 5  CEREBRAL RESUSCITATION

4:30 – 4:40 P.M.  W. Behringer/P. Safar
Hypothermia for Cerebral Preservation During CPR

4:45 – 4:55 P.M.  B. Böttiger
Effects of Inhibition of Caspases on Neuronal Degeneration

5:00 – 6:30 P.M.  PANEL VI

CEREBRAL RESUSCITATION

P. Safar, S. Tisherman (Moderators)
W. Behringer, N. Bircher, B. Böttiger, G. Ling, and F. Sterz

6:30 – 8:00 P.M.  Dinner

8:00 – 9:30 P.M.  PANEL VII

ANTI-ARRHYTHMIC DRUGS FOR FACILITATING CPR

N. Chandra-Strobos, V. Nadkarni (Moderator)
T. Aufderheide, P. Ding, R. Gazmuri, J. Ornato, and R. Svedjeholm
Thursday, June 7, 2001

7:15 – 8:15 A.M.  Breakfast

SESSION 6:  OUTCOME MEASUREMENTS

8:15 – 8:25 A.M.  A. Hallstrom
Should Time to Call Be Used in Assessing Time Gradients of Out-of-Hospital Cardiac Arrest?

8:30 – 8:40 A.M.  PY Ding
In-Hospital Resuscitation: The Taipei Experience

8:45 – 8:55 A.M.  P. Pepe/J. Wigginton
Gender-Related Differences in the Presentation and Outcomes in Out-of-Hospital Cardiac Arrest

9:00 – 9:10 A.M.  S. Stratton/J. Niemann
Impact of DNR on Survival to Discharge

9:15 – 9:25 A.M.  T. Auffderheide
Asystolic Unwitnessed Out-of-Hospital Cardiac Arrest As a Criterion for Waiving Resuscitation

9:30 – 9:40 A.M.  C. Babbs
Meta-Analysis of Studies on CPR

9:45 – 10:15 A.M.  Break

10:15 – 11:45 A.M.  PANEL VIII

OUTCOME MEASUREMENTS

G. Nichol. (Moderator)
T. Auffderheide, C. Babbs, PY Ding, N. Chandra-Strobos, A. Idris, and G. Sopko

11:45 A.M. – 1:15 P.M.  Lunch
11:45 A.M. – 1:15 P.M.  Lunch

1:15 – 2:45 P.M.      PANEL IX

CRITERIA FOR DISCONTINUING CPR EFFORTS

N. Chandra-Strobos, P. Safar (Moderators)

2:45 – 3:15 P.M.      Break

3:15 – 4:45 P.M.      PANEL X

CONFIRMING CARDIAC ARREST IN REAL-TIME:
MONITORING/MEASURING THE
EFFECTIVENESS OF CPR

G. Ewy, M.H. Weil (Moderators)

5:00 PM              ADJOURNMENT OF WOLF CREEK VI
WOLF CREEK CONFERENCE VI
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