

**Confédération Interalliée des Officiers Médicaux de
Réserve**
Interallied Confederation of Medical Reserve Officers



Mid Winter Meeting 2013 – Brussels (Belgium)
Réunion d'hiver 2013 – Bruxelles (Belgique)

Scientific Programme
Programme Scientifique

Abstracts of presentations
Résumés des conférences



CIOMR Mid Winter Meeting 2013

30.01.13 Wednesday

1400 Workshop "BATLS Update"

Col Walter Henny MD NL, Lt Chris Rankin RNR UK

1900 CIOMR Walking Dinner - [La Maison des Ailes - Rue Montoyer 1 - 1000 Brussels](#)

31.01.13 Thursday

1000 Opening Ceremony

1330 Board Meeting//Committee Meetings (parallel sessions)

1500 Committee Meeting OMC, Scientific

1530 Coffee Break

1545 Committee Meeting OMC, Scientific

1700 Transportation and Reception War Museum

01.02.13 Friday

0900 Scientific Programme Session 1

Coffee Break, TBA

1055 Scientific Programme Session 1

1200 Lunch / Continuing Education Committee Meeting

1300 Scientific Programme Session 2

01.02.13 Friday

Coffee Break, TBA

1500 Scientific Programme Session 2

1700 Transportation

2000 Gala Dinner

02.02.13 Saturday

0900 Executive Committee Meeting

1030 Coffee Break

1100 Closing Ceremony

1300 Lunch



CIOMR Mid Winter Meeting 2013

Scientific Programme

01 02 2013

0900 - 1200

Programme scientifique

01 02 2013

0900 - 1200

0900 Arrival - Installation - Welcome / Arrivée - Installation - Salutation

Dr Edward Pasman MD, Amsterdam, NL

Session 1

Vice Chair: Dr Edward Pasman MD

0905 Casualty Care Management: The French Approach.

Dr Marc Puidupin, Lyon, France

0930 Battlefield Resuscitation; A New Paradigm in the US Army, the Development of the Combat Lifesaver.

Dr Robert J. Kasulke MAJ GEN (Rtd), USA, MD, MPA FACS, Watertown, NY, USA.

0955 War Surgery in Kandahar Airfield Hospital.

Dr Dominique Misselyn, Brussels, Belgium.

1035 PHANTOM/MAN Computer Code: A Tool for Evaluating (Ballistic) Threats Against the Human Body Caused by Spin –Stabilized Projectiles (Bullets).

Dr Wilbo Crucq MD PhD, Netherlands.

1055 Military and Civilian Handover Communication in the Emergency Department: A Literature Review.

Cpl Rowena Slope RAuxAF, BA Hons MA PG Dip RGN, Southampton, United Kingdom.

1120 Update on COMEDS and the Relationship between CIOMR and COMEDS.

LTG G. Nedellec, Chairman of COMEDS, COMEDS and NATO Reserves

1200 Lunch 1200 – 1300



CIOMR Mid Winter Meeting 2013

Scientific Programme

01 02 2013

1300 - 1700

Programme scientifique

01 02 2013

1300 - 1700

1300 *Arrival Installation / Arrivée Installation*

Session 2

Vice Chair: Dr Edward Pasman MD

1300 *Flexible Ballistic Collar.*

Pim Rensink MSc, TNO Soesterberg, Netherlands.

1320 *A novel device, the ITClamp, controls severe bleeding*

Cdr (Rtd) Dennis Filips, MD, FRCSC. CEO of Innovative Trauma Care Inc

1340 *Specialized Nutritional Support Therapy (SNST) for the Severely Injured War Casualty: Who, When, What to Feed and Why.*

Linda Hall MSA RD CD CNSC, Landstuhl, Germany.

1400 *Prevention and Treatment of CRUSH Syndrome in Natural and Man-Made Disaster.*

Dr Rogier Caluwé MD, Moorselbaan, Belgium.

1450 *Medical Emergency Response Team (MERT); Bringing Damage Control Resuscitation to the Battlefield.*

Lt Col Giles R. Nordmann BSc (Hons) MBChB FRCA RAMC UK Defence Medical Services

1515 *French Medical Response in Situation of Mass Casualties.*

Dr Eric Lecarpentier MD, Service de Santé des Armées (Army Health Service), France.

1540 *Assessing the health risk of flood water exposure for military personnel.*

Maj Joris Wijnker DVM, IRAS Division Veterinary Public Health, NL.

1605 *Men Outside the Studies: Antibiotic Dosing in Previously Young Healthy Males with Acute Traumatic Amputations.*

Teri L Ogg, PharmD, Landstuhl, Germany



*Abstracts
and
Speaker Biographies*

CASUALTY CARE MANAGEMENT: THE FRENCH APPROACH

Marc Puidupin¹, Pierre-François Wey¹, Jean-Yves Martinez¹, Alain Puidupin², Eric Dardare¹,
Fabrice Petitjeans¹, Jacques Escarment¹

¹Hospital for the Instruction of the Armed Forces Desgenettes, Lyon, France

²Hospital of Instruction of the Armed Forces Laveran, Marseille, France

Management of battle casualties by French Military Health Service is based on forward medical care, forward surgery and early STRATMEDEVAC. Battlefield cares adapted to evolution of operational conditions, taking into account lessons learned from recent wars. Avoidable deaths are the reason of combat casualty care, involving each comrade in arms in prompt and appropriate care to stabilize casualty without delay until forward surgical unit. Damage control is a global care strategy for trauma bleeding patients, involving minimal rescue surgery associated with perioperative resuscitation including transfusion to avoid the lethal triad. Further intensive care during early strategic medevac warrants the treatment continuum at a high level of care.

Training course in combat trauma care academy is regularly reassessed according to lessons learned from the Forward Health Registry.

Biography

Col/OF5 Marc Puidupin MD is a specialist in Anesthesiology Intensive care and Emergency medicine, Chief of Department of anesthesiology, intensive care, emergency room, operative theatre, and the Combat Trauma Care Academy at the Hospital of Instruction for Armed Forces (HIA) Desgenettes, Lyon, since 2008.

Col. Puidupin was educated at Military Service Academy in Lyon as a general practitioner where he also gained his Diploma in Catastrophe Medicine. He later specialized in Anaesthesia and Intensive Care at the HAI Clermont Tonnerre, Brest while also obtaining his Infectious Disease Care Diploma. Additionally, he has a Ultrasonic Imaging Diploma in Anesthesiology and Intensive Care from Lyon.

Marc Puidupin has had extensive operational experience with ten tours ranging from ranging from Desert Storm to Afghanistan last year. Additionally, Col Puidupin has many MEDEVAC missions, literally by land, sea, and air.

Battlefield Resuscitation; A New Paradigm in the US Army

The Development of the Combat Lifesaver

*Maj Gen (RET) Robert J. Kasulke MD MPA FACS
International President Elect, CIOMR*

For many years, the US Army has had well trained Combat Medics who were tasked to provide care on the battlefield. As the current Mideast conflict progressed, it became apparent that there were three major causes of death due to wounds: exsanguination, airway obstruction and tension pneumothorax. We needed to train a large number of our infantrymen in recognizing and properly treating these injuries so that we could decrease battlefield mortality.

The training program to develop these skills was created and since its inception, we have trained thousands of Combat lifesavers. I will discuss the specifics of the training and the also the resulting decrease in death from wounds on the battlefield.

Biography

Major General Robert Kasulke is a vascular and general surgeon from Watertown, New York.

Educated at the United States War College, State University of New York, and Fordham University in New York; he also holds a Masters in Public Administration from Syracuse University. Having completed his residency in general surgery at Montefiore Health and Hospital Center in New York's Bronx, MGen Kasulke went on to complete his vascular fellowship at the University of Missouri - Columbia.

MGen Kasulke has held the appointment of Commanding General Army Reserve Medical Command and is the International President Elect for CIOMR. He currently holds posts as a staff physician at Carthage Area Hospital; Facility Medical Director, Gouverneur Correctional Facility; and Assistant Medical Examiner, Jefferson County. He has previously been employed as a staff physician at the Veteran's Administration, as a consultant in general / vascular surgery case reviews, assistant medical examiner, vascular surgeon, and director of surgical residents research amongst other appointments.

War Surgery in Kandahar Airfield Hospital

D.Misselyn
Hôpital Militaire Reine Astrid, Bruxelles

Introduction *The author was trauma surgeon during 4 months in the Multinational Hospital of Kandahar Airfield, Afghanistan.*

Methods *Cases reports and discussion of the current way of treating severe battle casualties at a level 3 Hospital.*

Results *95% survival*

Discussion/Conclusion: *Modern war brings severe battle casualties, maybe the worst ever. Their treatment is challenging, but ATLS rules and modern surgical techniques may achieve a high survival rate. The experience of war surgery may also be helpful in civilian practice for the treatment of poly-trauma patients.*

Dominique Misselyn is Belgian Army Major. Graduated trauma surgery at the Gasthuisberg University Hospital (Katholieke Universiteit Leuven) where he is still working as trauma surgeon. He has completed three operational tours of Afghanistan.

PHANTOM/MAN Computer Code: A Tool for Evaluating (Ballistic) Threats Against the Human Body Caused by Spin-Stabilized Projectiles (Bullets)

Wibo Crucq MD PhD

The PHANTOM/MAN computer model is a computerized representation of the human anatomy and physiology that originally was developed to simulate wounding and the resulting incapacitation, lethality, and (bio)medical consequences (whole blood requirement, length of hospital stay, and time required for surgical intervention) of bullets.

The model will permit computer-aided design (CAD) of bullets and determine exterior ballistics, wound ballistics, and human vulnerability. The system will also permit determination of the effectiveness of personal protective equipment and allows detailed casualty assessment with and without such equipment. The code was introduced in 1991 and has been the de-facto standard for wound ballistics and human vulnerability analysis in NATO and TTCP countries since that time. The code was independently evaluated by the MOD-UK in 1994 (date of report) and has been used in hundreds of projects for ministries/departments of defense and intelligence organizations.

Biography

Wibo Crucq received his Medical Doctor degree from Erasmus University Rotterdam, the Netherlands in 1983 and was awarded Doctor of Philosophy by the University of Leiden in 1991. Since 1985 he has worked on the Phantom/Man computer models which have become the de-facto standard for predicting small arms wound and exterior ballistics in NATO and TTCP countries. These computer models were developed with full knowledge of the Netherlands Government and relevant organizations, and were independently validated by the MOD-UK in 1991.

He has been an expert member to NATO meetings and workshops including the Joint Civil Military Medical Group, the NIMIC Insensitive Munitions Information Center, and the Behind Armor Blunt Trauma Expert Panel. He has published numerous technical papers on aerodynamics and wound ballistics in (inter)national journals and is the single author of more than 50 technical reports. Wibo fired well over a 100,000 rounds and has personal experience with a wide range of weapon systems ranging from 3 mm Australian Experimental to the .50 cal sniper rifle. He is married with two children.

Wibo has given more than 50 invited lectures and briefings to Special Forces and Law Enforcement counter-terrorism units. He has worked as a consultant/advisor to Defense Research Establishments and Ministry/Department of Defense organizations in NATO and TTCP countries.

Military and civilian handover communication in the ED: A literature review.

Cpl Rowena Slope RAF Auxilliary Reserves

Introduction *This literature review focuses on military and civilian handover communication in the Emergency Department (ED) between paramedic and receiving staff.*

Methods *The review was undertaken in two parts and looked at military and civilian handover communication. The review considered different types of studies on handover communication and alternative handover tools.*

Results *A total of 66 articles were selected for further examination but only eleven referred to handover in the military. The majority of studies were qualitative and employed methods consistent with grounded theory, ethnography and phenomenology. The main messages stressed effective multi-disciplinary team working and communication, and the need to further evaluate handover tools.*

Discussion/Conclusion *The review showed a knowledge gap within the literature on how handover is practised in the UK military. A greater awareness of different types of handover communication would benefit military and civilian healthcare providers and facilitate the transfer of knowledge between the two.*

Rowena Slope is a corporal nurse with Royal Auxiliary Air Force (RAF Reserve) 4626 Aeromedical Evacuation squadron and has worked as an Emergency Nurse in Southampton University Hospital NHS Trust for the last three years.

She is currently working on a PhD funded by the Economic and Social Research Council (ESRC) and the Faculty of Health Sciences at the University of Southampton (working title: *An exploration of handover communication in military and NHS emergency health care settings*). The PhD represents an extension of the Research for Patient Benefit (RfPB) handover study entitled *Improving the Quality of Ambulance Crew Handovers: A Qualitative Study of Knowledge Transfer in Emergency Care Teams*.

In addition to her nursing and military qualifications, she has a degree in International Relations with Development Studies from the University of Sussex (2/1), a Masters in International Conflict Analysis (Merit) from the University of Kent and will be awarded a Masters in Clinical Research from the University of Southampton in 2013.

Update on COMEDS and the Relationship between CIOMR and COMEDS.

LTG G. Nedellec, Chairman of COMEDS, COMEDS and NATO Reserves

The Committee of the Chiefs of Military Medical Services in NATO (COMEDS) is the senior committee for medical care within the Organization. It acts as the central point for the development and coordination of military medical matters and for providing medical advice to the NATO Military Committee.

The military medical community plays a key enabling role within NATO and, more specifically, within NATO's defence planning process. The military medical community not only provides medical care, but also preventive health care, veterinary support and psychological support for deployed troops. It provides essential combat service support, making it one of the key planning domains for operations, along with armaments, logistics, air traffic management and other areas of specialization.

COMEDS makes recommendations concerning the development and assessment of NATO military medical policy and procedures for medical support. It seeks to improve existing arrangements between member countries in the fields of co-ordination, standardization and interoperability. It also helps to improve the exchange of information between countries so, for instance, advances made by one member state are available to all. Additionally, COMEDS undertakes studies of general and particular interest such as preventive medicine, dental service, food hygiene and military psychiatry. For this purpose, it has several subordinate working groups and expert panels to which subject matter experts contribute.

Source: NATO Online

Update on COMEDS and the Relationship between CIOMR and COMEDS.

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Source: NATO Online

Chairman of the COMEDS – Lieutenant General Gérard Nédellec

As of 21 Nov 2012 Lieutenant General Gérard Nédellec was appointed Chairman of the Committee of the chiefs of the military medical services in NATO (COMEDS).

From 2009 to 2012, Lieutenant General Gérard Nédellec was the chief of the French Military Medical Service (*Directeur central du service de santé des armées*).

LTG Nédellec is a medical doctor who graduated from the University of Bordeaux, France in 1976 and is a Professor of Internal Medicine.

His career assignments included tours as Senior Medical Officer, Lifou Medical District, New Caledonia/France (Public Health Service), 2nd Régiment d'Hélicoptères de Combat, Fribourg, Germany. He was head of the Medical Department, "Daguet" Field Hospital during the "Desert Storm" Operation in 1991.

He completed his fellowship in Internal Medicine in Brest. Then he served as haematologist at the Military Medical Centres Clermont-Tonnerre (Brest), Val de Grâce (Paris) and Percy (Clamart). He was head of the Haematology Department of the "Percy" Military Medical Centre and taught the Ecole d'Application du Service de Santé des Armées (*French post graduate Military Medical Academy*).

In 2004, he assumed staff position as chief of Hospital Policy, Office of the Surgeon General. In 2005 he was promoted Brigadier General (*médecin général*) and was appointed Assistant Deputy Surgeon General in charge of the Military Medical Centres until 2007. Then he commanded the "Sainte-Anne" Military Medical Centre in Toulon (France) where he led the construction and the set-up of this brand-new Regional Trauma Centre.

LTG Nédellec awards include the Legion d'Honneur (Commander), Ordre National du Mérite (Officer), Médaille d'Honneur du Service de Santé des Armées (Silver), Croix de Guerre (TOE), Récompense pour Travaux Scientifiques ou Techniques (Silver).

LTG Nédellec is married and has three children.

Flexible Ballistic Collar

Pim Rensink MSc

The neck of the modern infantry soldier is poorly protected against ballistic threats, as a result of the complexity of the combined requirements: sufficient ballistic protection, head agility, shape variance for the protected area resulting from head movement and last but not least, the interaction with helmet and body armor.

TNO has developed and tested an innovative flexible ballistic collar, using modern fabric forming techniques to achieve a soft protection, adjusting its 3D configuration constantly to the varying shape of the neck area.

Prototypes have been manufactured and were mechanically tested to investigate the influence of repeated collar deformation. Ballistic tests have been performed using 1.1 gram Fragment Simulating Projectiles, on new and mechanically aged ballistic collars. A minimum penetration velocity of 400m/s has been found, resulting in significant casualty reduction

The presentation describes the concept design, effect of the ballistic collar on human factors, the ballistic tests and the modeling result for casualty reduction.

Biography

To enhance the performance and safety of the dismounted soldier, by approaching the soldier and his equipment as one system. That's the goal of Pim Rensink, working as an innovator at TNO, the Dutch Organization for Applied Scientific Research. Pim Rensink has a background in Industrial design Engineering and is specialized in Soldier systems and Human factors.

He worked as a project leader and soldier systems expert closely together with the Dutch MoD, TNO specialists and industries to develop innovative equipment concepts in a diverse spectrum; a vision for the future Dutch Soldier system, modular ballistic helmet, CBRN clothing concepts, passive exoskeleton and innovative night vision goggles.

“A novel device, the ITClamp, controls severe bleeding”.

Dennis Filips¹, Sarvesh Logsetty², Jonathan Tan³, Ian Atkinson¹ and Kelly Mottet¹

¹Innovative Trauma Care Inc., Edmonton, Alberta, Canada

²University of Manitoba, Winnipeg, Saskatchewan, Canada

³University of Calgary, Calgary, Alberta, Canada

Introduction: Hemorrhage is a leading cause of battlefield death; the need exists for innovative solutions. Innovative Trauma Care (ITC) Inc. has designed a temporary wound closure device, the ITClamp, for rapid bleeding control.

Methods: A pre-clinical study using a life threatening hemorrhage swine model was completed. There were four treatment arms, control (no treatment), standard gauze, early ITClamp and late ITClamp (3 minute delay). The primary endpoints were survival, survival time and external blood loss.

Results: 100% of animals treated with the ITClamp survived through the end of the experiment, compared to 60% in standard gauze treated and 0% of control animals. In addition, ITClamp treatment groups survived significantly longer than control animals and external blood loss was reduced in ITClamp treatment groups.

Conclusion: The ITClamp is a new and innovative tool that can control severe bleeding in the pre-hospital setting.

Biography

Commander (Retired) Dennis Filips, MD, FRCSC is the Chief Executive Officer (CEO) of Innovative Trauma Care Inc., a medical device company developing and commercializing “point of injury” solutions. Dr. Filips retired from the Canadian forces after 20 years of service, completing tours in Afghanistan, Bosnia, and the Golan Heights.

He created the Canadian Forces Tactical Combat Casualty Care training program, created and chaired the Combat Casualty Working Group for the Canadian Forces, and was a member of the Combat Casualty Care research steering committee for Canada, US, UK, Australia and New Zealand. Dr. Filips completed a trauma fellowship at Sunnybrook & Women’s College Health Sciences Centre in Toronto, Ontario in 2002, his general surgery residency at the University of Toronto in 2001, and medical school at Queen’s University (Kingston, ON) in 1991.

Specialized Nutrition Support Therapy (SNST) for the severely injured war casualty: Who, When, Where, What to feed and Why

Linda A. Hall, MSA, RD, CD, CNSC
Dietitian, Landstuhl Regional Medical Center, Landstuhl Germany

Specialized nutrition support therapy (SNST) refers to the provision of calories, protein, electrolytes, vitamins, minerals, trace elements, and fluids by the enteral (tube feeding into stomach, duodenum or jejunum) or parenteral (intravenous) routes when nutrients cannot be consumed normally.

The presentation will include the indications and fundamentals for SNST for severe traumatic brain injury, burns, and multiple traumatic injuries. Additionally, presented will be the benefits of enteral over parenteral nutrition, the absolute contraindications for enteral nutrition, the type and amount of macronutrients and micronutrients that have been found to be beneficial to support the patient through their complex and comprehensive medical and surgical care.

Clinical practice guidelines for SNST will be presented including guidelines from the European Society of Parenteral and Enteral Nutrition (ESPEN), Society of Critical Care Medicine (SCCM), American Society of Parenteral and Enteral Nutrition (ASPEN), Institute of Medicine (IOM), VA/DoD Clinical Practice Guideline (CPG), Joint Theater Trauma System Clinical Practice Guideline (JTTS CPG), Canadian Clinical Practice Guideline for Nutrition Support.

Major Linda Hall has recently retired reservist from the United States Army Specialist Corps and she currently works as a registered dietitian at Landstuhl Regional Medical Center in Germany.

Linda Hall initially graduated from Louisiana Tech University with a B.S. in Dietetics, then she went on to gain her Masters in Administration at Mt Pleasant University in Michigan. During her service career she has completed the Joint Field Feeding Course and MAMC Serve Safe courses in addition to her required career and promotion courses.

During Maj Hall's service career she has served in various appointments both in the United States and overseas; this also includes completing an active duty tour with 344th Combat Support Hospital in Iraq. She has been published as a co-author in the International Journal of Pharmaceutical Compounding and has received the Coin of Excellence Award Army Medical Command for her expertise the MEDCOM working group.

Prevention and Treatment of CRUSH syndrome in natural and man-made disaster

Rogier Caluwé¹, Bruno Van Vlem¹, Raymond Vanholder²

¹Nephrology Department, OLV Hospital Aalst, Belgium

²Nephrology Department, University Hospital Ghent, Belgium

High circulating plasma myoglobin levels secondary to rhabdomyolysis can cause heme pigment-associated acute kidney injury (AKI) (1). Much of our knowledge of rhabdomyolysis-associated AKI derives from observations of rhabdomyolysis that occurs as part of the CRUSH syndrome resulting from large scale natural or man-made disasters (2). After death due to direct trauma, CRUSH syndrome is the second leading cause of death following disasters. However, it is reversible if treated properly (3).

In 1989, the International Society of Nephrology established the Renal Disaster Relief Task Force (RDRTF) to offer support in disaster areas where AKI is a concern (4). The RDRTF's main focus is the treatment of AKI caused by natural disasters, although the RDRTF has also helped provide care for patients with kidney disease during man-made disasters, such as the Israel-Lebanon war of 2006.

Recently, the European Renal Best Practice (ERBP) recommendations for the management of CRUSH victims in mass disasters were published (5). We think these recommendations deserve the attention of military medics and paramedics as the CRUSH syndrome is a probably underestimated problem in battlefield casualties.

1. Zager RA et al. Rhabdomyolysis and myoglobinuric acute renal failure. *Kidney Int* 1996; 49: 314
2. Better OS et al. Early management of shock and prophylaxis of acute renal failure in traumatic rhabdomyolysis. *N Engl J Med* 1990; 322: 825
3. Sever MS et al. Management of crush-related injuries after disasters. *N Engl J Med* 2006; 354: 1052
4. Vanholder R et al. The role of the Renal Disaster Relief Task Force. *Nat Clin Pract Nephrol* 2008; 4: 347
5. Sever MS, Vanholder R and the Workgroup on Recommendations for the Management of Crush Victims in Mass Disasters. Recommendations for the management of crush victims in mass disasters. *Nephrol Dial Transplant* 2012; 17: Supplement 1, i1-i67

Rogier Caluwé obtained his MD degree from the University of Ghent, Belgium; where he also gained his degrees in Internal Medicine and Nephrology. He currently works as a Nephrologist at OLV Hospital Aalst, Belgium

Rogier also served as a volunteer member of the International Society of Nephrology / Renal Disaster Relief Task Force on active mission in January 2010 on the occasion of the earthquake in Port-au-Prince, Haiti

Medical Emergency Response Team (MERT); Bringing Damage Control Resuscitation to the Battlefield

Lt Col Giles R Nordmann BSc(Hons). MBChB FRCA RAMC.

Consultant Paediatric Anaesthetist, MDHU Derriford; Consultant Anaesthetist, 16 Medical
Regiment; Research Fellow, Defence Science and Technology Laboratory

French medical response in situation of mass casualties

Eric Lecarpentier^{1,2}, Alain Margenet^{1,2}, Philippe Pimart^{1,2}, Marc Puidupin²

¹Service d'Aide Médicale Urgente - France

²Service de Santé des Armées – France

The French civil organization of Emergency Medicine has, for many years, inspired its methodology of action from the medical concepts established by the Army Health Service, particularly in managing mass casualties resulting from disasters. The philosophy of on-scene triage and flying ambulances established by Dominique Larrey are probably the best examples. Through the presentation of civil organizations and the exemplary structures that were implemented during major events, we can analyze the points of convergence and the needed development.

The identification, recognition and understanding of these points are essential to study the capability shortfalls and the synergies that can be proposed to the various working groups of NATO.

Doctor Lieutenant-Colonel Eric Lecarpentier is currently employed as an emergency medical practitioner. As a civilian he has served as the Defence Advisor to the Ministry of Health and the French representative NATO's Joint Medical Committee (JMC) (Senior Civil Committee at NATO). He is the Chair of the JMC and has been the signature of the synergy between CIOMR-JMC. He has assisted, advised, and led on many international emergency and public health responses by the French Government to El Salvador, Mexico, Ivory Coast, Pakistan, Gaza Strip, Hurricane Mitch, and the hostage crisis in Beslan School, North Ossetia.

During MD Lt Col. Lecarpentier's military reserve career he has been posted as the physician assistant on PCO Mistral in charge of emergency air evacuation in 2006; Mission - GEOM Medical Officer in charge of emergencies - 2004; and several missions as medical physician on board National French Navy warships in Africa, East, and North Atlantic.

Eric Lecarpentier trained as a doctor with Bronze Medal in Paris V. He has earned a National Diploma in Emergency Medicine as well as University Diplomas in Disaster Medicine, Emergency Medicine, Managing Health Emergencies, and Dispatching Center / Control Room Emergency Medicine. He has completed additional training in CBRN event (Chemical, Biological, Radiological and Nuclear risks) as well as completing the IHEDN - (Institute of Advanced Studies in High Security and National Defence) in Paris.

Assessing the health risk of flood water exposure for military personnel

Major (res) Joris Wijnker DVM PhD

Introduction

Military personnel is exposed to surface water regularly during training, humanitarian aid (civilian evacuation after flooding) and tactical operations via waterways (Marine Corps). In all these circumstances the surface water can be heavily contaminated with faecal matter, due to manure spreading for farmland enrichment, overflowing sewer systems or waterways being used as open sewers in under-developed regions, resulting in potential health risks for military personnel deployed in these conditions.

*High concentrations ($10^4 - 10^8$ CFU / L) of various pathogens, e.g. enterobacteria, *E. coli*, *Campylobacter*, *Giardia*, *Legionella*, *Norovirus*, *Enterovirus*, *Leptospira*, can be found in contaminated flood water.*

Fortunately exposure of military personnel to these pathogens does not immediately lead to great loss of operational capacity due to existing vaccination schemes, built-up immunity after regular low-dose exposure and applied personnel hygiene.

However, a better understanding of these potential risks is relevant to determine if surface water is suitable for training / recreation purposes. In addition, better preparations can be made and personnel instructed to improve on health risk awareness during deployment in these conditions.

Major (res) Joris Wijnker graduated in 1998 as DVM and then spent 5 years as general practitioner and equine anaesthesiologist. In 2004 he made a career change towards the meat industry, which led to a PhD in 2009 and registration as Specialist Veterinary Public Health.

In 2011 his firm VPH Consultancy was established, focussing on veterinary public health, with clients in the meat industry and a part-time teaching position at IRAS.

In addition, having served in the Medical Corps 23 years ago during the Compulsory Army Service, 2012 also brought the realisation of a long-term ambition to return to the Army, this time as military veterinarian. Over the past years much effort was put by several colleagues into developing a "Dutch Military Veterinary Corps" which consists of reserve officers only. This group of military veterinarians has now found its way into the general structure of the Dutch Armed Forces and is working hard to become a valuable asset to the Dutch Armed forces.

Men outside the studies: Antibiotic dosing in previously young healthy males with acute traumatic amputations

*Teri L. Ogg, PharmD
Landstuhl Regional Medical Center, Germany*

Patients who sustain traumatic amputations while in Afghanistan are stabilized and transported to Landstuhl Regional Medical Center (LRMC) within days of injury. These patients are at high risk of infection due to the amount of foreign material that came into contact with their wounds. If these patients do need to be placed on broad antibiotic coverage, dosing weight based medications such as vancomycin and tobramycin can become complicated due to severity of injury. This patient population cannot be found in most population studies of antibiotics.

Presentation will review standards in antibiotic therapy, discuss variables that must be considered, and explore case studies showing changes in pharmacodynamics within patients with multiple traumatic amputations.

Dr Teri Ogg PharmD currently works for the US Department of the Army as an ICU Clinical Pharmacist, Landstuhl Regional Medical Center, Landstuhl, Germany.

Teri completed her Bachelor of Science in Pharmacy and Doctor of Pharmacy at the University of Montana. She has worked with Kaiser Permanente in Portland, Oregon; later an International Travel medicine clinic pharmacist and ambulatory patient care residency in the Portland VA Medical Center, Portland, Oregon.



Handouts

Recommended Reading and websites for specialized nutrition support therapy (SNST)
CIOMR Scientific Session 01 February 2013
Linda A. Hall, MSA, RD, CD, CNSC
MAJ, USAR (retired)

Nutrition, Anabolism, and the Wound Healing Process: An Overview

Eplasty. 2009; 9: e9. Published online 2009 February 3.

Robert H. Demling, MD: Harvard Medical School, Burn and Trauma Center, Brigham and Women's Hospital, Boston, MA: Correspondence: Email: rhdemling@partners.org

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<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2642618>

A.S.P.E.N: American Society for Enteral and Parenteral Nutrition

<http://www.nutritioncare.org>

AND: Academy of Nutrition and Dietetics

<http://www.eatright.org>

Critical Illness Guideline 2012 . Executive Summary of Recommendations

<http://andevidencelibrary.com/topic.cfm?cat=4840>

Canadian Clinical Practice Guidelines, nutrition 2012

<http://www.criticalcarenutrition.com>

http://www.criticalcarenutrition.com/index.php?option=com_content&view=category&layout=blog&id=21&Itemid=10

<http://www.criticalcarenutrition.com/docs/Summary%20CPGs%202012%20vs%202009.pdf>

ESPEN: European Society for Parenteral and Enteral Nutrition.

<http://espen.org>

<http://espen.org/education/espen-guidelines>

JTTS CPG: Joint Theater Trauma System Clinical Practice Guidelines.

http://www.usaisr.amedd.army.mil/joint_trauma_system.html

Evaluation of military trauma system practices related to complications after injury.

<http://www.ncbi.nlm.nih.gov/pubmed/23192071>

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