

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



Mid Winter Meeting 2012 – Brussels (Belgium)
Réunion d'hiver 2012 – Bruxelles (Belgique)

Scientific Programme
Programme Scientific

Abstracts of presentations
Résumés des conférences



CIOMR Mid Winter Meeting 2012

CIOMR Réunion d'hiver 2012

<i>08.02.11</i>	<i>Wednesday</i>
0900	Workshop “Thoracic Surgery”
1600	<i>Col Olaf Penn, Maj Christine Vermeulen</i>
1600	Board Meeting
1930	CIOMR Walking Dinner
<i>09.02.11</i>	<i>Thursday</i>
1030	Opening Ceremony
1330	Board Meeting
1500	Committee Meeting OMC, Scientific
1530	Coffee Break
1545	Committee Meeting OMC, Scientific
1700	Transportation and Reception War Museum
<i>10.02.11</i>	<i>Friday</i>
0900	Scientific Programme Session 1
1025	Coffee Break (Poster Session)
1055	Scientific Programme Session 1
1200	Lunch (Poster Session)
1300	Scientific Programme Session 2
1430	Coffee Break (Poster Session)
1500	Scientific Programme Session 2
1700	Transportation
2000	Gala Dinner
<i>11.02.11</i>	<i>Saturday</i>
0900	Executive Committee Meeting
1030	Coffee Break
1100	Closing Ceremony (Poster Price)
1300	Lunch



CIOMR Mid Winter Meeting 2012
CIOMR Réunion d'hiver 2012

Scientific Programme

10 02 2012

0900 - 1200

Programme scientifique

10 02 2012

0900 - 1200

- 0900 Arrival - Installation - Welcome / Arrivée - Installation - Salutation**
Dr Gregor A Stavrou, Hamburg, Germany - Dr Stef Stienstra, Beek-Ubbergen, NL
- 0905 Session 1**
1200 Chair: *Dr Gregor A Stavrou, Hamburg, Germany*
- 0905 Current Treatment Concepts in Liver Trauma.**
Prof Dr Karl J Oldhafer, Hamburg, Germany
- 0925 Control of Critical Bleeding in a Combat Situation – Hemostatic Products.**
Dr Jacques D Müller-Broich, Bonn, Germany
- 0945 Current Concepts in multiple Trauma Care.**
PD Dr Gerrit Matthes, Greifswald, Germany
- 1005 Military Response to a Natural Disaster (Haiti 2010) and the Role of Reserve Medical Personnel.**
Dr Michael de la Roche, Ontario, Canada
- 1025 Coffee break (Poster Session)**
- 1055 Damage Control in War Surgery. How it is implemented in the French Medical Corps.**
G Prof Dr Francois Pons, Paris, France
- 1115 Current Strategies for the Treatment of Blast Injuries to the Extremities.**
Dr Dan Bieler, Koblenz, Germany
- 1135 Spine Trauma Imaging – State of the Art.**
Prof Dr Jerzy Walecki, Warsaw, Poland
- 1200 Lunch 1200 – 1300 (Poster Session)**



CIOMR Mid Winter Meeting 2012
CIOMR Réunion d'hiver 2012

Scientific Programme

10 02 2012

1300 - 1700

Programme scientifique

10 02 2012

1300 - 1700

1300 Arrival Installation / *Arrivée Installation*

1300 Session 2

1700 *Chair: Dr Stef Stienstra*

1300 Penetrating Trauma of the Abdomen and the Extremities.

Dr Bart JM Vanderheyden, Brussels, Belgium

1320 Rehabilitation after Amputation of Wounded Soldiers – Current Situation in the German Army.

Dr Mirko Weinrich, Berlin, Germany

1340 Experience Feedback from a Surgical Mission in Tchad (2010). French Military Health Service.

Prof Dr Philippe Willems, Saint Cloud, France

1400 Surgical Outcome in War in Resource and Training Dependant.

Mr David M Nott, London, UK

1430 *Coffee break (Poster Session)*

1500 The Joint Theater Trauma System, how it works, and how it has increased Survival Rates in the Current War.

MG Dr Robert J Kasulke, MD, Falls Church, USA

1530 MEDACTOOL.

Dr Valerie Denux, MD, PhD, Paris, France

1615 NATO Curriculum for Military Surgeons.

Dr Teun van Egmond, Netherlands

Poster

1. Peter Collins Canadian Forces Health Services Primary Reserve, Toronto (Canada)
“Feigning Posttraumatic Stress Disorder: pure malingering, partial malingering and false imputation in military setting”
2. Johan Lock MD Charite University Hospital, Abdominal Surgery Berlin (Germany)
“Novel techniques for the evaluation of liver dysfunction during postoperative sepsis”
3. Matthias Oldhaver PhD University of Freiburg, Dept. of Sports medicine (Germany)
“Immunomodulation in professional sportsmen through yeast cell preparations”
4. Bart Vanderheyden MD, Militair Hospitaal Koningin Astrid, Brussels (Belgium)
“Flow Chart for Penetrating Trauma of the Abdomen”
5. Bart Vanderheyden MD, Militair Hospitaal Koningin Astrid, Brussels (Belgium)
“Flow Chart for Penetrating Trauma of the Extremities”
6. Luc Noppen MD, Military Hospital Queen Astrid, Brussels (Belgium)
“ Surgical Activities of a Level 2 Military Field Hospital in a low intensity Conflict Zone: Experience of the Belgian UNIFIL Mission in South Lebanon, 2006-2008”

Current Concepts in the Treatment of Liver Trauma.

K.J. Oldhafer and G.A. Stavrou

Department of General and Visceral Surgery, Asklepios Hospital Barmbek, Hamburg, Germany

Introduction

Treatment Concepts in Liver Trauma have dramatically changed over the years. Nowadays most patients can be treated conservatively in a specialised environment.

Aggressive Surgical treatment requires skills in liver surgery and knowledge of the anatomy. Packing maneuvers are safe if performed right.

Discussion/Conclusion

The conservative approach to Liver Trauma requires a specialist team with experience in HPB Surgery as well as a good level of intensive care availability and diagnostic proficiency.

If the conservative approach is also justified in a hostile environment with limited resources can only be decided on an individual basis.

Control of critical bleeding in a combat situation – hemostatic products.

J.D. Mueller-Broich, R. Pflugmacher

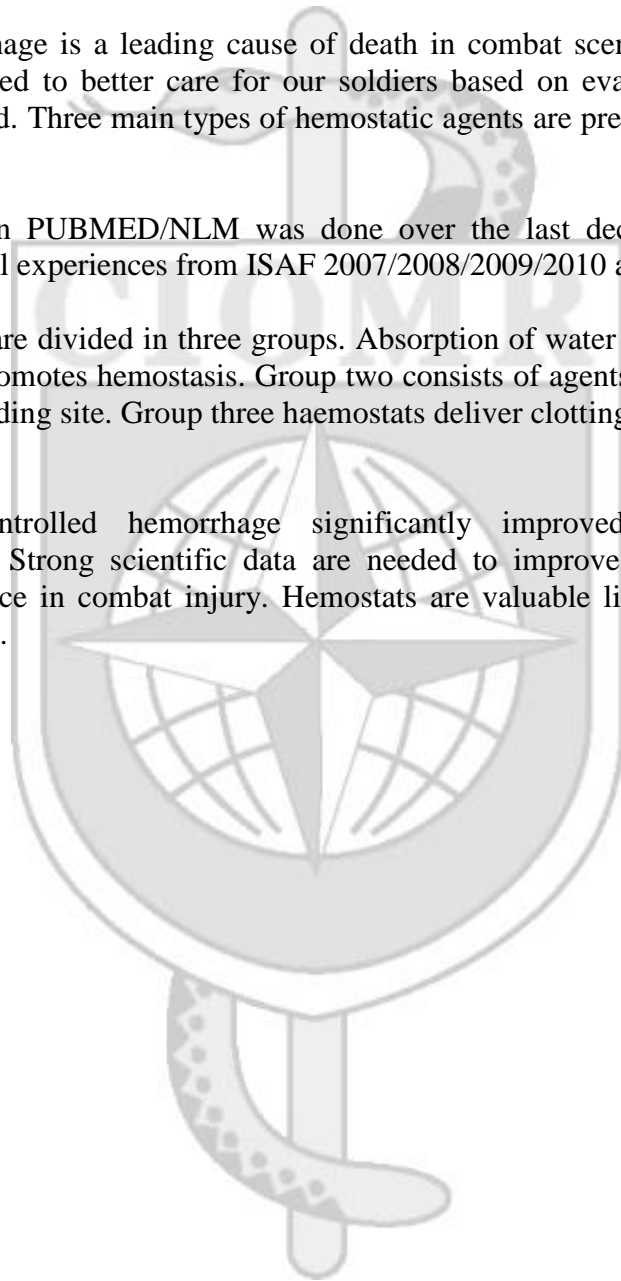
¹Department of orthopaedic and trauma surgery, University Hospital Bonn, Germany

Uncontrolled hemorrhage is a leading cause of death in combat scenarios. Tactical combat casualty care developed to better care for our soldiers based on evaluation of injuries and death on the battlefield. Three main types of hemostatic agents are presented and discussed in this presentation.

A literature review in PUBMED/NLM was done over the last decade. German airborne personnel and personal experiences from ISAF 2007/2008/2009/2010 are taken into account.

Hemostatic products are divided in three groups. Absorption of water and upconcentration of coagulation factors promotes hemostasis. Group two consists of agents binding themselves to tissue sealing the bleeding site. Group three haemostats deliver clotting factors to the bleeding site.

Hemostats in uncontrolled hemorrhage significantly improved prehospital combat casualty/trauma care. Strong scientific data are needed to improve our understanding on hemostatic performance in combat injury. Hemostats are valuable life savers, but far from being ideal substances.



Current concepts in multiple trauma care.

Gerrit Matthes^{1,2} and Axel Ekkernkamp^{1,2}

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²Ernst-Moritz-Arndt University Greifswald, Dept. of Trauma and Reconstructive Surgery, Germany

In spite of a significantly improved trauma management during the past decades the treatment of multiple injured patients remains complicated. This especially under wartime conditions. Hence, current concepts of initial multiple trauma management are highlighted. Key issues of the preclinical treatment as well as the initial management in the trauma bay are described. Furthermore, current principles of damage control are presented. Based on the recently published evidence based interdisciplinary trauma guidelines of the German Trauma Society (DGU) state-of-the-art procedures are pinpointed. Moreover, educational concepts like PHTLS®, ATLS® and, DSTC® are described.



MILITARY RESPONSE TO A NATURAL DISASTER (HAITI 2010) AND THE ROLE OF RESERVE MEDICAL PERSONNEL.

Michael de la Roche

Canadian Forces Health Services Primary Reserve

In January 2010 Haiti was subjected to a 7.0 magnitude earthquake with caused widespread devastation and loss of life. Canada was on of the first nations to send in Medical personnel to assist with initial rescue and evacuation in the form of a D.A.R.T. as well as on-going medical treatment, evacuation, and air transport of Canadian Nationals back to Canada. In all over 4,000 patients and Canadian Nationals living in Haiti were identified and repatriated to Canada. Reserve medical personnel working in conjunction with the Regular force, played a key role in the management and transport of many of these patients. Some of the issues and challenges of Military management in Natural Disasters will be discussed as well as the integration of Reserve Medical Personnel and Regular Force Personnel into a single unified unit.



Damage Control in War Surgery. How it is implemented in the French Medical Corps.

F. Pons

Ecole du Val de Grâce – Paris - France
Department of Thoracic and Visceral Surgery - Percy Military Hospital – Clamart - France

Damage Control Surgery (DCS) has been proven to be efficient for the treatment of bleeding unstable patients in civilian conditions. The US experience in Iraq and Afghanistan has demonstrated it is possible in war conditions. The French Medical Corps is facing the same kind of War Wounded in Afghanistan and must be able to use DCS.

The principles and the requirements of DCS are described : it is used not only for abdominal bleeding injuries (packing, stapling, open abdomen) but also for every unstable bleeding wounded patients (orthopedic, vascular, thoracic DC). The elements of the French Medical Corps are described (training , First Aid, primary evacuation, whole blood transfusion, surgical procedure, Medevac...)

Examples of wounded patients managed in Afghanistan at the Kabul Military Medical Facility illustrate the efficiency of DCS.

DCS is efficient but requires important medical and logistical resources and the training of each member of the staff, especially the surgeons whatever their specialties.

Le damage control en chirurgie de guerre. Mise en oeuvre dans le Service de Santé des Armées Français.

La tactique du Damage Control (DC) pour la prise en charge des blessés hémorragiques graves a fait la preuve de son efficacité en milieu civil. L'expérience américaine en Irak et en Afghanistan a démontré qu'elle était possible en chirurgie de guerre. Confronté au même type de blessés en Afghanistan le service de santé français doit pouvoir utiliser cette tactique.

Les principes et les impératifs de la tactique du DC sont présents : il ne se limite pas aux plaies de l'abdomen (packing, agrafages, abdomen ouvert) mais est étendu à tous les blessés graves hémorragiques instables (DC orthopédique, vasculaire, thoracique). Les éléments mis en place au niveau du SSA français sont décrits (formation des personnels, relève, évacuation primaire, transfusion de sang total, tactique chirurgicale, évacuation secondaire...)

Des exemples de blessés traités en Afghanistan à l'HMC de Kaboul illustrent l'efficacité de ce concept.

Le concept de DC est un concept efficace mais exigeant la mise en place de lourds moyens médicaux et logistiques tout au long de la chaîne d'évacuation et une formation de tous les personnels, en particulier les chirurgiens quelle que soit leur spécialité.

CURRENT STRATEGIES FOR THE REATMENT OF BLAST INJURIES TO THE EXTREMITIES.

D. Bieler¹, A. Franke¹, S. Hentsch¹, E.W. Kollig¹

¹Department of Orthopedics, Trauma Surgery, Hand Surgery, Plastic Surgery, and Burn Medicine
German Armed Forces Central Hospital, Koblenz, Germany

Because of the current conflicts that are characterized by asymmetric warfare, blast injuries have become common. In recent years, mortality has been successfully reduced as a result of improvements in military personal protective equipment and advances in the initial surgical stabilization of casualties on the basis of the principles of damage-control surgery.

Blast injuries fall into five categories (primary, secondary, tertiary, quaternary and quinary blast injuries). Combinations of different types of blast injuries can occur as well. We use case reports and a review of the literature to present current strategies of treatment from damage control surgery up to reconstructive surgery, the ultimate goal of which is always a useful and functional limb.

In summary, the treatment of blast injuries to the extremities requires specialist expertise, extensive experience and often close interdisciplinary cooperation because of the wide variety and complexity of the types of injuries encountered.

Spine Trauma Imaging - State of the Art.

Jerzy Walecki, Wojciech Skweres

The Department of Radiology and Diagnostic Imaging at the Medical Centre of Postgraduate Education in Warsaw, Poland

Spine trauma is a serious clinic problem and a proper treatment depends directly on the early and right diagnosis. Spine trauma imaging is based on X-ray imaging, which is still a significant routine examination, as well as CT and MRI methods. Both CT scanning and MRI imaging have advantages and limitations. That is why the authors want to concentrate on a procedural algorithm in accordance with a particular type of spinal injury. At the same time it should be kept in mind that in many situations there is only one imaging method possible. Therefore, the publication aims at discussing trauma symptomatology for each method separately. The authors present the most typical spinal injuries especially discussing the spinal cord posttraumatic changes, which demand exceptionally detailed and quick diagnosis appropriate for successful treatment.

Penetrating Trauma of the Abdomen and the Extremities.

BJM Vanderheyden Major MD

Queen Astrid Hospital Brussels

In trauma surgery, there are two very different strategies: the care for blunt and for penetrating injuries. The purpose of this study was to analyse the specificity of penetrating trauma of the abdomen and the extremities and to assess the accuracy of the existing protocols for diagnosis and treatment. As material we used the data sheet of 360 patients with penetrating injuries: stab wounds and gunshot wounds. As method of study, clinical observations of patients in a trauma unit were analysed in a prospective way. As a conclusion we can claim that trauma care for penetrating injuries is a challenge in strategy, decision-making and technical skills. In the discussion it is clear, that there is need for a good trauma protocol. Finally, we have made protocols in a flow chart format per anatomical area.

Flow Chart for Penetrating Trauma of the Extremities. (Poster)

In trauma surgery, there are two very different strategies: the care for blunt and for penetrating injuries. The purpose of this study was to analyse the specificity of penetrating trauma of the extremities and to assess the accuracy of the existing protocols for diagnosis and treatment. As material we used the data sheet of patients with penetrating extremity injuries: 25 with stab wounds and 106 with gunshot wounds. As method of study, clinical observations of patients in a trauma unit were analysed in a prospective way. As a conclusion we can claim that trauma care for penetrating injuries is a challenge in strategy, decision-making and technical skills. In the discussion it is clear, that there is need for a good trauma protocol. Finally, we have made a protocol in a flow chart format for penetrating trauma of the extremities.

Flow Chart for Penetrating Trauma of the Abdomen. (Poster)

In trauma surgery, there are two very different strategies: the care for blunt and for penetrating injuries. The purpose of this study was to analyse the specificity of penetrating trauma of the abdomen and to assess the accuracy of the existing protocols for diagnosis and treatment. As material we used the data sheet of patients with abdominal penetrating injuries: 21 with stab wounds and 98 with gunshot wounds. As method of study, clinical observations of patients in a trauma unit were analysed in a prospective way. As a conclusion we can claim that trauma care for penetrating injuries is a challenge in strategy, decision-making and technical skills. In the discussion it is clear, that there is need for a good trauma protocol. Finally, we have made a protocol in a flow chart format for penetrating trauma of the abdomen.

Rehabilitation after amputation of wounded soldiers – current situation in the German Army.

M. Weinrich, F. Rauhut

Military Hospital of the German Armed Forces in Berlin

Rehabilitation after an amputation is one of the most demanding tasks in rehabilitative medicine. The amputation rate for injured victims of modern warfare during the last years is on the rise. Compared with civil amputees we find a young and active military patient under special conditions. To address the special surgical, orthopaedic technical, psychological and social needs of the soldiers a multidisciplinary team is necessary. The orthopaedic department of the military hospital in Berlin is specialized in this treatment of amputees. Including case reports and introducing own technical developments we discuss the current situation for military amputees in Germany. Finally, to reach an excellent outcome from the first surgical step until high level activity a specialized orthopaedic centre combined with a central coordinated rehabilitation program in Germany is needed.



Experience Feedback from a surgical mission in Tchad, (2010), France.

Pr. P. Willems

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Chirurgien Attache de Service de Chirurgie Orthopédique, HIA Percy, France

Médecin chef du cadre de réserve , j'ai participé avec la 9^oACA ,à une OPEX .Cette opération s'est déroulée du 28 avril au 17 juin2010 à N'Djamena , République du Tchad .La 9^oACA était logée ,dans l'HMC ,situé dans l'enceinte du camp Kassei siège habituel de l'opération Epervier .La mission ,était le soutien des forces Françaises stationnées au Tchad et la prise en charge des militaires Tchadiens blessés dans des combats à la frontière du soudan .88 patients ont été opérés ,2 étaient des militaires Français ,3 des blessés Tchadiens .Les autres patients étaient des civils ,nous avons traité 18 enfants .Nous disposions des moyens orthopédiques de l'HMC : scanner, table orthopédique ,matériel d'ostéosynthèse .C'est la seule structure orthopédique du pays dotée de tels moyens .Les interventions les plus fréquents concernaient des accidents de la voie publique .J'ai choisi d'opérer des enfants ,en particulier porteurs de séquelles de brûlures responsables de handicaps sévères .Les blessés des membres par projectiles ont été pris en charge selon les règles du damage control. Ces procédures ont été adaptées au contexte opérationnel, par le médecin général Rigal ,on a apprécié leur efficacité . J'ai constaté l'apport des lambeaux de couvertures sur l'évolution des fractures ouvertes .Ces missions ,sont d'excellents terrain d'exercices , on pourrait souhaiter ,être accompagné de jeunes chirurgiens en formation pour qu'ils développent leur expérience . Le contexte humanitaire de ces missions rend, quelques fois difficile, l'adhésion des personnels infirmiers .Enfin, on ne peut s'empêcher de réfléchir à la justification du coût de ces activités essentiellement destinées aux civils Tchadiens .

Surgical Outcome in War in Resource and Training Dependant.

David M Nott

Trauma and Vascular Surgeon, St Marys Hospital, London.

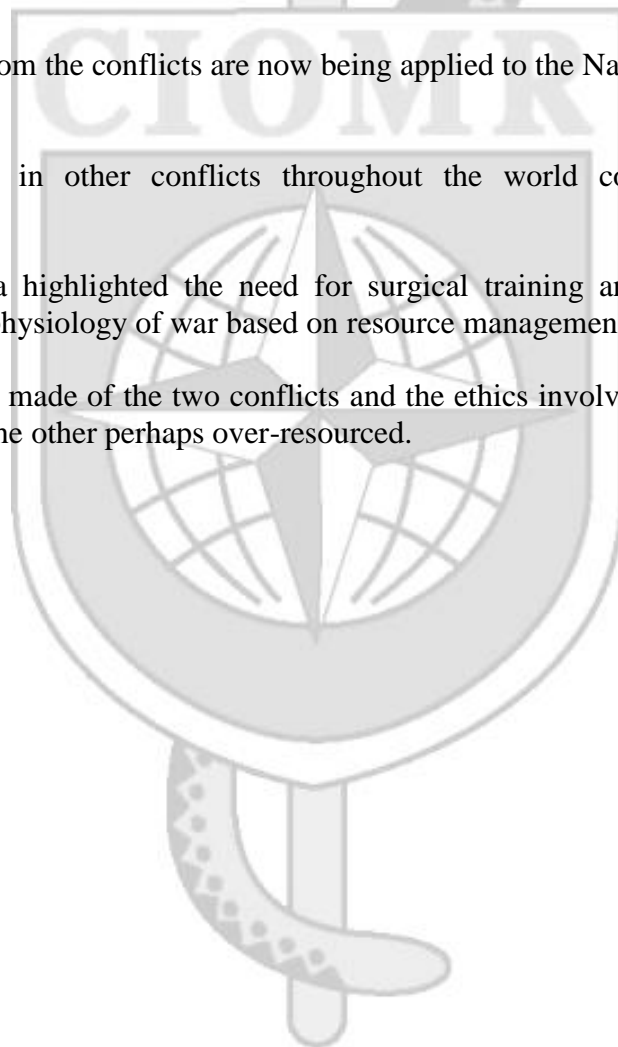
The UK Defence Medical Services over the past decade, through training and applying the knowledge gained through research, has produced survival rates for trauma victims at Camp Bastion Afghanistan, comparable with the best in the world. Improvements in pre-hospital care, transportation, surgery and the management of massive haemorrhage have been instrumental. Pre-deployment surgical training has been bespoke to the needs of the trauma patients.

The lessons learned from the conflicts are now being applied to the National Health Service in the UK.

Trauma management in other conflicts throughout the world could benefit from the knowledge gained.

The conflict in Libya highlighted the need for surgical training and the development of understanding of the physiology of war based on resource management.

A stark comparison is made of the two conflicts and the ethics involved when one conflict is under-resourced and the other perhaps over-resourced.



The Joint Theater Trauma System, How It works, and How It Has Increased Survival Rates in the Current War.

MG Robert J. Kasulke MD MPA FACS

Commanding General, Army Reserve Medical Command (USAR)
National Science Officer, Reserve Officers Association
US VP, CIOMR

The Joint Theater Trauma System (JTTS) was developed soon after OIF and OEF had commenced. The JTTS is headquartered at Ft. Sam Houston, in San Antonio, TX. This organization has developed processes that allow for real time accumulation of treatment related data points for every injury that occurs in theater. In addition, these data streams are continuously analyzed and compared with similar cases to determine (utilizing advanced statistical methodology) what is the best practice approach to the resuscitation and treatment for each of the myriad types of battlefield injuries, from the initial injury to the release back to the field, discharge from the hospital to military or civilian life, or to a rehabilitation center.

I will discuss some of the major paradigm shifts that the work of the JTTS has brought about in the resuscitation and treatment of those who have suffered battlefield injuries.

Specifically, I will focus my talk on abdominal injuries. This will include the use of massive blood transfusions, fluid resuscitation, in treating profound shock, surgical techniques, and treating those with concurrent injuries, i.e., amputations, burns and blast.

The presentation will give the attendees an introduction to the scope of work and methodology of the JTTS and how, through its work, we have been able to significantly decrease mortality from battle and non battle related injuries.

Feigning Posttraumatic Stress Disorder: pure malingering, partial malingering and false imputation in military setting. (Poster)

Peter I. Collins

Division of Forensic Psychiatry, University of Toronto &
Canadian Forces Health Services Primary Reserve

Combat stress reactions are cognitive, behavioural and emotional reactions experienced by a percentage of members who have been exposed to stressful events in combat. A percentage of the individuals, experiencing combat stress reaction will develop Posttraumatic Stress Disorder. A smaller percentage of individuals will feign symptoms for secondary gain.

Pure malingering is when an individual feigns a disorder that does not exist at all. When an individual has actual symptoms but consciously exaggerates them is *partial malingering*.

False imputation refers to the attribution of actual symptoms to a cause consciously recognized by the individual as having no relationship to the symptoms. False imputation is more difficult to identify as malingering because the individual can, from personal experience, accurately describe the symptoms.

The presenter will discuss the signs and symptoms of malingered PTSD, and will provide case examples.

Novel techniques for the evaluation of liver dysfunction during postoperative sepsis. (P)

J. F. Lock

Department of General, Visceral and Transplantation Surgery,
Charité – Universitätsmedizin Berlin, Germany

Sepsis is a severe, frequently life-threatening complication after surgery. The incidence of sepsis rises is higher for trauma and especially battlefield surgery [1]. In severe cases of sepsis clinicians are confronted with multi-organ dysfunction syndrome (MODS). While hemodynamic, respiratory or renal dysfunctions are simple to diagnose, liver dysfunction cannot be easily diagnosed [2].

Patients with symptoms of beginning sepsis (fever, neutrophilia, heart and respiratory rate) who were admitted to the ICU were enrolled in an observational trial. After informed consent the patients were assessed with modern liver function tests at baseline and days 2, 5, and 10. The clinical data was collected. Liver function was determined by indocyanine green elimination test[3] and LiMAX test [4].

Sepsis lead to a severe decrease of metabolic liver function within few days. In cases with fast recovery a fast recovery of liver function was determined. In contrast, patients with critically decreased liver function developed further secondary complications and needed much longer time for recovery. The response of conventional biochemical liver parameters to sepsis was delayed in comparison to dynamic liver function tests.

Dynamic liver functions tests enable the early diagnosis of liver dysfunction before conventional parameters become definite. Thus the direct assessment of hepatic function during sepsis might enable the individual adoption of therapy and thus might have the potential to improve the management of septic patients.

Effects of a yeast-cells-based dietary supplement on immune reaction and oxidative stress in clinically healthy subjects. (P)

Deibert P^{1,2}, Oldhaver M³ and Berg A¹

¹ University Hospital, Department of Sports Medicine, Freiburg, Germany

² Institute of Preventive Medicine (IPM®), Freiburg, Germany

³ Dr. Wolz Zell GmbH, Preparations for Complementary Therapy, Geisenheim, Germany

The aim of the study was to add some new results to the current discussion about the efficacy of dietary supplements especially for people facing physically and mentally demanding situations like sportsmen and soldiers.

11 clinically healthy and normal-weight subjects were examined before and after a four week period of intervention. Target variables were analyzed at pre-check-up and after a control phase of one week before and after a 4-weeks intervention period with a daily given dosage of 30 ml of “Dr. Wolz Zell Immunkomplex®”, an immunoactive preparation containing bioactive substances, enzymes, vitamins, amino acids, minerals, trace elements and a high content of beta-glucan (900 mg/dosage)

For all participants after intervention the concentration of free radicals was significantly ($p < 0.01$) lowered at all measuring times (0, 60, 120, 180, 240 min) compared with U-0,

It can be assumed that the regular intake of the tested immune complex induce a significant adjustment in immunological as well as antioxidant regulations. This modulation may be of specific benefit in preventive health care especially for people who are under enormous pressure like soldiers in combat situations.

Surgical activities of a Level 2 military field hospital in a low intensity conflict zone: experience of the Belgian UNIFIL mission in South Lebanon, 2006-2008. (P)

Major Luc Noppen, MD, Peter Vorlat, MD**, Lt Col Paul-Emile Chenois***, Capt Audrey Collée*, Lt Col Rudy Van Bos, MD**

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The Belgian Level 2 military field hospital was deployed in October 2006 in the UNIFIL area in order to provide medical care to the military as well as humanitarian aid. Over a two year period, 472 operations were performed. Compared to the classical military mission the surgical activity level was lower and the surgical pathology was less severe. Minor, but statistically significant differences between military and civilian patient categories will be discussed in the text. This kind of surgical activity allowed us to maintain a necessary level of readiness in case of changing conflict intensity, but has implications on functioning, structure and medical supplies. The information in this article can be useful to military and medical planners when planning the deployment of a typical military hospital structure in a low intensity conflict zone with a complementary mission of humanitarian aid.

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