



CIOMR Mid Winter Meeting 2007

CIOMR Réunion d'hiver 2007

Scientific Programme

Friday, 16 February 2007

Queen Elisabeth Quarters – Evere (Belgium)
Block 4 - Meeting Room 'Malmédy'

Programme scientifique

Vendredi 16 février 2007

Quartier Reine Elisabeth – Evere (Belgique)
Bloc 4 - Salle Malmédy

- 0900** **Arrival - Installation / Arrivée – Installation**
- 0915** **Approche française des enjeux du renseignement médical dans le cadre otanien.**
Médecin en Chef (r) Christian Le Roux
Vice-Président de l'Union Nationale des Médecins de Réserve
ORSAC du CIRAM de PARIS DRSSA BREST
- 0935** **The Bundeswehr School of Dog Handling**
Lieutenant Colonel L. Buchner, D.V.M.
Bundeswehr School of Dog Handling, Ulmen, Germany
- 0955** **Military intelligence and stress management on mission**
Médecin Lieutenant-colonel (R) Alexandre Van Acker
- 1015** **Coffee Break / Pause-café**
- 1045** **Approche de l'appui médical belge aux forces UNIFIL au LIBAN**
Lieutenant-colonel (R) Dominique Di Duca
Eléments Médicaux d'Intervention 22, Landen, Belgique
- 1105** **Médecine de prévention appliquée aux personnels militaires en France**
(Military Occupational Health care in France)
Colonel (r) Jean-Pierre Capel
Direction Régionale du Service de Santé des Armées « Saint Germain en Laye » - France
- 1125** **From Traumatic Injury to Recovery in Afghanistan: The Experience of Working in a Role 3, Multi-National Hospital**
Lieutenant (N) K.J. Brown and Lieutenant (N) J.H. Hnatiuk
Health Services Primary Reserve List
Department of National Defence, Canada
- 1145** **The level of effort at the lower limb during the weight load march in the Canadian military population: is it too much demanding ?**
Major L.J. Hébert, PhD, PT
Canadian Forces Health Services Headquarters, Health Services Delivery, Ottawa, Canada
Faculty of Medicine, Radiology Department, Université Laval, Quebec, Canada
Valcartier Garrison, CSV, Quebec, Canada
- 1205** **Wound patterns (polytrauma) experienced in the current conflicts in Afghanistan and Iraq.**
Major General Robert J. Kasulke
Deputy Surgeon General Mobilization, Readiness and Reserve Affairs USAR
- 1225** **End of the scientific session / Fin de la session scientifique**

Simultaneous translation English – French - Traduction simultanée anglais – français

The level of effort at the lower limb during the weight load march in the Canadian military population: is it too much demanding?

Maj L.J. Hébert^{1,2,3}, PT, PhD, Sylvie Nadeau^{4,5} PT, PhD,

¹Canadian Forces Health Services Headquarters, Health Services Delivery, Ottawa, Canada

²Faculty of Medicine, Radiology Department, Université Laval, Quebec, Canada

³Valcartier Garrison, CSV, Quebec, Canada

⁴Centre de recherche interdisciplinaire en réadaptation, IRM, Montreal, Canada

⁵École de Réadaptation, Université de Montréal, Montreal, Canada

Introduction. Despite modern technologies, the infantryman continues to carry ever-increasing loads during a typical Weight load March (WLM), a task that is suspected to require several soldiers to work near their musculoskeletal-biomechanical limits.

Methods. Thirty-five Canadian soldiers (mean age; 34.4±7.4) were submitted to a physical examination, dynamometric testing, and a laboratory session. Normal walking (NW), fast walking (FW), normal WLM (NWLM) and fast WLM (FWLM) were assessed. The Muscular Utilization Ratio (MUR) was used to estimate the mechanical relative demand of the plantarflexor (PF), knee extensor (KE), hip flexor (HF) and hip extensor (HE) muscles.

Results For a given muscle group, the differences in the peak MUR between the four walking conditions were all significant except for the peak HF MUR between the FW and NWLM conditions. The walking speeds and cadences were all statistically different between conditions ($p < 0.05$) except between FW and FWLM. This suggests that the significant changes (mean values PF=14,7%, KE=29,5%, HF=16,47%, HE=12,2%) observed in the Peak MUR between these two conditions might be directly associated to the loading factor. Using a natural pace the Peak MURs ranged from 30 to 122%.

Discussion/Conclusion For some soldiers, WLM requires high levels of effort reaching their maximum strength. Further analyses will aim to determine the relationship between the laboratory, and clinical data and the true performance recorded in the field to better understand the limiting factors and suggest tailored training strategies.

Les niveaux d'effort au membre inférieur lors de la marche forcée avec charge chez les militaires canadiens: est-ce trop exigeant?

L.J. Hébert^{1,2,3}, pht, PhD, Sylvie Nadeau^{4,5} pht, PhD,

¹Quartier Général des Services de santé des Forces canadiennes, Prestation des soins de santé, Ottawa, Canada

²Faculté de médecine, département de radiologie, Université Laval, Québec, Canada

³Garrison Valcartier, CSV, Québec, Canada

⁴Centre de recherche interdisciplinaire en réadaptation, IRM, Montréal, Canada

⁵École de Réadaptation, Université de Montréal, Montréal, Canada

Introduction. En dépit des progrès technologiques, lors des marches forcées avec charge (MFC), les fantassins continuent de transporter des charges qui vont en augmentant, une tâche que l'on soupçonne d'être assez exigeante pour obliger certains soldats à travailler près de leurs limites biomécaniques-musculosquelettiques.

Méthodologie. Trente cinq soldats (âge moyen; 34.4±7.4) ont participé à une session comprenant un examen physique, des tests dynamométriques et une session en laboratoire. La marche normale (MN), la marche rapide (MR), la MFC normale (MFCN) et la MFC rapide (MFCR) ont été évaluées. Le taux d'utilisation musculaire (TUM) a été utilisé pour estimer le

niveau d'effort musculaire relatif des muscles fléchisseurs plantaires (FP), extenseurs du genou (EG), fléchisseurs (FH) et extenseurs de la hanche (FH).

Results Pour un groupe musculaire donné, les différences dans les valeurs sommet des TUM entre les quatre conditions de marche étaient toutes significatives sauf pour les valeurs sommets des TUM FH entre la MR et la MFCN. Les vitesses de marche et les cadences étaient toutes statistiquement différentes ($p < 0.05$) sauf entre la MR et la MFCR. Ceci suggère que les changements significatifs (mean values PF=14,7%, KE=29,5%, HF=16,47%, HE=12,2%) observés dans les valeurs sommets des TUM entre ces 2 conditions sont possiblement directement associés au facteur de charge. À cadence naturelle, les valeurs sommets des TUMs variaient de 30 à 122%.

Discussion/Conclusion Pour certains soldats, la MFC exige des niveaux d'efforts considérables atteignant le maximum de leur force. Des analyses futures vont permettre de déterminer les relations qui existent entre les variables en laboratoire, les variables cliniques et celles enregistrées sur le terrain afin de mieux comprendre les facteurs limitant la performance et proposer un entraînement sur mesure.

Biography - Major Luc J. Hébert, PT, PhD

Dr Hébert is a physiotherapist with the Canadian Forces Primary Reserve List. He served with the Regular Forces from 1982 to 1996 where he was appointed to different units in Canada and overseas. After his training at the Montreal University in 1982, he completed a Master Degree in Biomedical Sciences at the same University in 1989. He also obtained a PhD degree in Experimental Medicine at l'Université Laval in 2001. Major Hébert contributed to a book chapter, published 25 major papers and more than 60 abstracts. He taught at the Montreal University from 1987 to 1992. He is teaching at the Faculty of medicine at L'Université Laval since 1990 where he is adjunct professor and also occupies the function of the director of research at the radiology department. He is a researcher with the Quebec provincial rehabilitation network. Part of his research focus on the variables that best explain and predict musculo-skeletal (MSK) injuries in the military population as well as factors limiting the performance of soldiers. He also developed a an expertise in the assessment of upper limb MSK pathologies using novel interventional magnetic resonance imaging techniques. He received several research funds as principal investigator and co-investigator. Since May 2000, Dr Hébert is the National physiotherapy-training director for the Canadian Forces Health services Headquarter, Health Services delivery.

„The Bundeswehr School of Dog Handling“

Leander Buchner¹⁾, Christiane Ernst²⁾

¹⁾*Bundeswehr School of Dog Handling, Ulmen*

²⁾*Medical Command II, Diez*

The Bundeswehr School of Dog Handling in Ulmen is the central and only military training centre for the service dogs and personnel, it functions also as the central supplying and procurement office. It compiles and develops principles and the training. There are specific veterinary medicine tasks and the quality assurance in training and missions. The school is organized in four detachments, the staff, the training and teaching, the veterinary clinic and the combat development.

As of today, units from various Bundeswehr branches as the airborne infantry, the MP, the EOD and engineers have been equipped with specially trained working dogs: Every year, about 120 working dogs are needed, 80 of which are trained at the School to be patrol dogs and 40 to be specialized dogs. The procurement is a bottleneck of vital importance. The purchase of working dogs comprises three phases, the pre-purchase test, the physical examination and the preparatory training during a period of probation. In most cases, there were several findings in one animal that exclude from purchase. The most common reasons for rejection were hip displasia, arthroses or spondyloses.

To compensate this deficit, the School was tasked with the breeding of working dogs for the Bundeswehr.

The importance of dogs in the forces has been growing during the last years because of the foreign deployments of the Bundeswehr. And at last: Dogs are not an ordnance they are living fellow creatures.

Biography

Dr. Leander Buchner

Born 1958 near Munich, 1978 Enlistment to the basic military service at the German Air Force
1978/79 Officer Course at the Air Force Officer School, Fürstenfeldbruck

1981 – 1987 Study of Veterinary Medicine at the Ludwig Maximilians University, Munich

1987 Promotion to Captain Veterinary Corps at the Central Institute of the Medical Service of the Bundeswehr, Munich

1993 Relocation to Military District Command V/ 10th Armoured Division, Sigmaringen

1994 Relocation to Military District Command II/ 1st Armoured Division, Hanover

1996 Promotion to LTC Veterinary Corps

1999 Relocation to the Federal Ministry of Defence – Central Medical Service Staff

2005 Relocation to the Bundeswehr School of Dog Handling

Deployments abroad:

1993 UNTAC, Phnom Penh, Cambodia; 2001 HQ SFOR, Sarajevo; 2002 GECON ISAF, Kabul; 2003 HQ KFOR, Pristina; 2004 HQ KFOR, Pristina and Allied Joint Force Command, Naples

APPROCHE FRANCAISE DES ENJEUX DU RENSEIGNEMENT MEDICAL DANS LE CADRE OTANIEN

Médecin en Chef (r) Christian LE ROUX
Vice-Président de l'Union Nationale des Médecins de Réserve

*ORSAC du CIRAM de PARIS
DRSSA BREST*

Approche française des enjeux du renseignement médical dans le cadre otanien

Depuis 2002, l'OTAN a eu la volonté d'élaborer une doctrine commune dans le domaine du renseignement médical.

Le concept développé sous l'impulsion anglo-saxonne avec l'appellation de « medical intelligence » a été validé sur la base d'une acception commune le définissant comme le renseignement relevant des domaines médicaux, épidémiologiques et environnementaux. Cette définition se rapporte à l'objet du renseignement et non aux techniques.

Après un premier examen par le COMEDS dès 2003 puis par le Comité militaire de l'OTAN en 2004, un consensus après discussion a abouti en juin 2006 (document AJP 4.10.3).

La doctrine établie répond aux besoins d'évaluer les moyens dont doivent disposer les forces armées déployées sur le théâtre, à partir du recueil d'informations sur les menaces et risques sanitaires.

Ce recueil suppose une interface entre la communauté médicale et celle du renseignement. Un cadre éthique doit être délimité.

French multinational medical intelligence vision in NATO operations

Since 2002, NATO attempted to produce a common doctrine about military intelligence in medical aspects. This concept, impelled by anglo-saxon partners as « medical intelligence » (MEDINT) was commonly agreed on the basis of its definition as intelligence coming from medical, epidemiologic and environmental informations.

The definition is reliable to the object of this kind of intelligence and not to technical means. After first analysis by COMEDS in 2003 and by the NATO military Committee in 2004, a consensual document was agreed, after discussion, in June 2006 (Allied Joint Publication 4.10.3).

The doctrine, as established, permits evaluation of all means needed by deployed armed forces, drawn from informations collected on sanitary threats and risks.

That collection is the result of both interfacing medical and intelligence fields. A coherent organisation must lay upon ethic principles.

Biographie

Gastro-Entérologue, Radiologue, Ancien Chargé d'Enseignement clinique à la Faculté de Médecine Paris Ouest, le Docteur Christian LE ROUX est Chef de Service à l'Hôpital du Vésinet.

Vice Président (Mer) de l'Union Nationale des Médecins de Réserve, il est Auditeur de l'Institut des Hautes Etudes de Défense Nationale et occupe depuis 1987 le poste de Conseiller Santé auprès du Commandant du Centre d'Instruction des Réserves de la Marine à Paris. Il a participé à la cellule d'organisation des congrès de la CIOMR en France : Paris en 1991 et Strasbourg en 2002. Il a été représentant permanent de la Délégation française aux sessions de la CIOMR sans interruption de 1995 à 2006. Vice Président du Comité F.A.C.

Médaille d'Honneur du Service de Santé des Armées. Chevalier de la Légion d'Honneur.

From Traumatic Injury to Recovery in Afghanistan: The Experience of Working in a Role 3, Multi-National Hospital

Lt (N) K.J. Brown and Lt(N) J.H. Hnatiuk
*Health Services Primary Reserve List
Department of National Defence, Canada*

This presentation offers a unique and intimate story, of the experience of two reserve nurses working in a Role 3, Multi-National Hospital in Afghanistan. From the adrenaline rush of the trauma intake, to the physical rehabilitation of an 8 year-old Afghanistan girl caught in the crossfire, and the palliation of a dying soldier, the military nurse is an integral part of the multi-disciplinary team.

Long gone are the safe walls of the local tertiary care centre. In its place is a particle board hospital with state of the art equipment, surrounded by hesco bunkers. The nursing 'uniform' is a military one and includes a 9mm pistol, and combat boots which could be covered with the blood of yesterday's suicide bomber. The multi-national team includes interpreters, medics, nurses, physicians, and surgeons from a variety of countries. At any given time a multitude of languages can be heard and the atmosphere is one of collegial learning.

Discussion will be provided around the benefits and challenges of working as a member of a multi-national team and will include a slide show depicting the journey of the presenters.

Major General ROBERT JOHN KASULKE (USAR)

**Deputy Surgeon (IMA), Mobilization, Readiness and Reserve Affairs
Office of the Surgeon General
Falls Church, Virginia 22041-3258
since March 2005**

The topic will be the wound patterns (polytrauma) experienced in the current conflicts in Afghanistan and Iraq. The methods and results of treatment and long term followup. The days from the beginning of the conflict through Sept 2006. It includes data from all services.

The results are encouraging as there are less KIA's and Mortalities from wounds in this conflict than ever before in our military medical experience. There are unique injury patterns that have been observed which will be brought out in the discussion.

SOURCE AND YEARS OF COMMISSIONED SERVICE

Direct, Over 25

CURRENT OCCUPATION

President, Robert J. Kasulke, MD, PC, Watertown, New York

MILITARY SCHOOLS ATTENDED

Army Medical Department Officer Basic and Advanced Courses
United States Army Command General Staff College
United States Army War College

EDUCATIONAL DEGREES

Fordham University - BS Degree - Biology
Syracuse University Maxwell School of Citizenship and
Public Administration - MPA Degree - Public Administration
State University of New York, Syracuse, College of Medicine -
MD Degree - Medicine

FOREIGN LANGUAGE

None recorded

PROMOTIONS

DATES OF APPOINTMENT

<u>Rank</u>	<u>Component</u>	<u>Date</u>
CPT	USAR	11 Jun 80
MAJ	USAR	15 Nov 83
LTC	USAR	14 Nov 90
COL	USAR	28 Jun 96
BG	USAR	14 Jan 02
MG	USAR	01 Jul 05

MAJOR DUTY ASSIGNMENT

FROM TO ASSIGNMENT

USAR - NOT ON ACTIVE DUTY

Jun 80	Jul 81	General Surgeon, 5503d United States Army Hospital, Columbia, Missouri (Jun-Jul 81, non-rated)
Aug 81	Jan 84	General Surgeon, 912th Combat Support Hospital, Johnson City, Tennessee Student, Combat Casualty Care Course, Fort Sam Houston, Texas (Jan 83, ADT)
Jan 84	Aug 84	Control Group

Major General ROBERT JOHN KASULKE (USAR)

Aug 84	Aug 92	Commander, Hospital Units 1, 2 and 3, 310th Field Hospital, Malone, New York
Aug 92	Aug 93	General Surgeon, 376th Combat Support Hospital (Hospital Unit Base), Malone, New York
Aug 93	Aug 94	Chief of Surgery, 376th Combat Support Hospital (Hospital Unit Surgical), Liverpool, New York
Aug 94	Aug 95	Commander, 376th Combat Support Hospital (Hospital Unit Surgical), Liverpool, New York
Aug 95	Aug 99	Commander, 4218th United States Army Hospital, Liverpool, New York
Aug 99	May 01	Commander, 865th Combat Support Hospital, Utica, New York
May 01	Mar 05	Commander, 8th Medical Brigade, Brooklyn, New York
Mar 05	Jul 05	Deputy Surgeon (IMA), Mobilization, Readiness and Reserve Affairs, Office of the Surgeon General, Falls Church, Virginia

SUMMARY OF JOINT EXPERIENCE

<u>DATE</u>	<u>RANK</u>	<u>ASSIGNMENT</u>
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None

US DECORATIONS AND BADGES

Legion of Merit

Meritorious Service Medal

Army Commendation Medal (with 2 Oak Leaf Clusters)

Expert Field Medical Badge

As of 3 March 2006

Military intelligence and stress management on mission

Alexander E. VAN ACKER
Neuro-psychiatry, Avenue Louise, 503 BRUSSELS, B-1050

Too often Military Intelligence is associated with assessment of the enemy, however, as we know from all times, knowledge about the state and morale of your own troops is as important.

Sun Tzu already mentioned in 500 BC "He will win whose army is animated by the same spirit throughout all it's ranks"

Our armed forces actually do a lot about what can be called the exterior stress. This means about objective stressors on missions: the alien geography en climate, lack of comfort and sleep, insecurity, hostile groups outside the camp, fights and battle, aso... However the main invalidating psychological factor is what can be called the subjective, internal stress. With what problems, painful memories and dysfunctional mental strategies does a person join the unit? Helping those people is the unit's challenge. It's more preventive, "health" work, and more complicated, but worth the investment.

Biography

Alexander E VAN ACKER,

Born in Gent in 1950

Medical Doctor degree from Gent State University

Specialisation in neuropsychiatry in Holland (Leiden Univ Clin), Deutschland (Köln Univ Clin), England (London Univ Clin) and Belgium (Leuven Univ Clin)

Work experience in USA (NYC & Salt Lake City), Australia (Melbourne-Austin Repatriation Hospital & Cairns Tropical Diseases H.), Germany (München-Harlachingen Hosp & Bonn-Venusberg Univ Hosp), South Africa (Bloemfontein Univ Hosp)

Now directs his private practice group (14 people)

Military experience: Belgian Military Hospital in Cologne, Battle Stress cell member, under Med Col A. Bellens, PTSD specialisation, Stress on mission, Stress in training (boot camp, infantry & pilots), Stress levels assesment, Retainment problems.

Talks given : in London on Eating disorders in 82, different talks to GPs and colleagues over the years on different psychiatric topics.

Military talks: At CIOMR in Vienna, Brussels, Gent; at the World Military Medicine Conference in St Petersburg, Russia; at AMSUS in Nashville & San Antonio.

« Approche de l'appui médical belge aux forces UNIFIL au LIBAN »

Lieutenant-colonel (R) Dominique DI DUCA
Eléments Médicaux d'Intervention 22 de Landen, Belgique

Introduction : – La Belgique a, dès juillet/août 2006, marqué son intérêt afin de venir en aide aux populations au sud LIBAN.

Dès septembre, un contingent belge de près de 400 militaires se déployait à TIBNIN dont 82 personnels du service médical.

Methodes utilisées:– Quelques cas concrets vécus permettront présenter succinctement la mise en place d'un appui médical Role 1 co-localisé avec le Role 2 au sein de l'UNIFIL. Agissant tant pour les militaires belges qu'appartenant à d'autres nations ou bien de la population locale. Un déploiement de cette importance dans un théâtre d'opération internationale est une première pour la Composante Médicale belge.

Resultats:– La co-localisation d'un détachement médical Role 1 et d'un Role 2 améliore sensiblement la qualité des soins. Les moyens en matériel et personnel sont déployés au profit de des 15.000 militaires UNIFIL et autant de Forces Armées Libanaises (LAF) afin de prodiguer au moins des soins d'aussi bonne qualité que dans leurs pays respectifs. Il faut aussi aider les 90.000 civils de la région sans se substituer aux infrastructures civiles subsistantes, mais en les complétant ou les remplaçant en cas d'urgence. La communication entre les nations sur place augmente le taux de fréquentation des infrastructures et devrait permettre d'éviter d'installer de moyens nationaux qui pourraient s'avérer superflus, voire plus utiles sur d'autres théâtres. Le personnel médical belge fait place pour certaines fonctions à des collègues d'autres nations. Ceci ne pose pas de problème.

Discussion/Conclusion – L'hôpital belge Role 2 a, en moins de deux mois, établi une notoriété qui a dépassé les limites territoriales de la zone UNIFIL. Les coûts induits par les soins aux civils n'ont pas influencé l'activité destinée aux militaires. L'internationalisation du personnel de l'hôpital n'a pas encore modifié les données précédentes.

Lors du congrès de RIGA, un exposé plus complet devrait permettre de présenter l'activité sur près d'une année.