

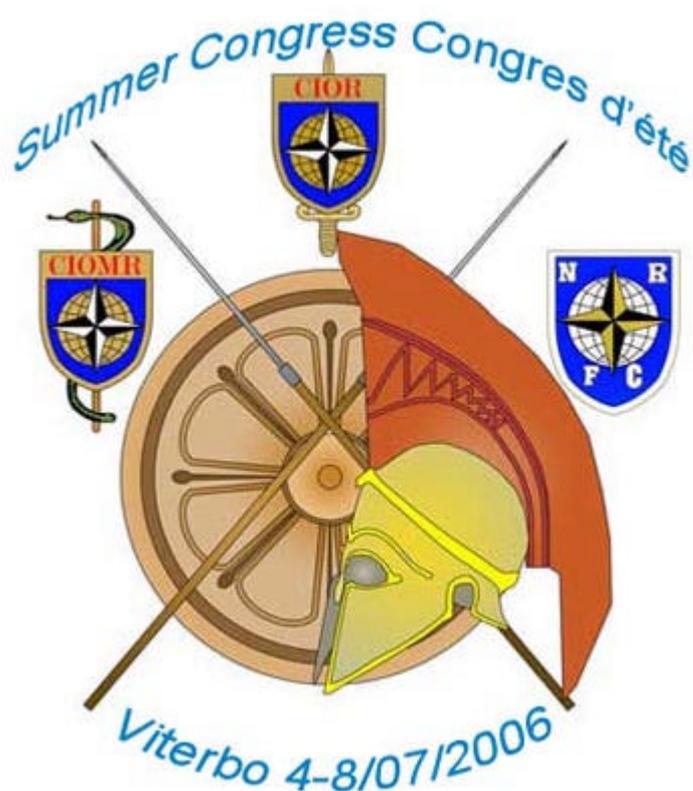
Confédération Interalliée des Officiers Médicaux de Réserve
Interallied Confederation of Medical Reserve Officers



Summer Congress 2006 – VITERBO (ITALY)
Congrès d'été 2006 – VITERBO (ITALIE)

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EVALUATION DU RISQUE D'HEPATITE E PAR LA RECHERCHE DES ANTICORPS SPECIFIQUES DANS UNE POPULATION MILITAIRE ITALIENNE.

DI VINCENZO G., BIANCOTTI P.P., SARNO G. (ITA)
Med Corps de Santé

L'hépatite E est une maladie aiguë et subaiguë à diffusion par les selles qui a des caractéristiques d'endémicité dans des pays tropicaux et subtropicaux. La plupart des missions de maintien de la paix se déroulent dans tels pays.

La revue de la bibliographie disponible a mis en évidence que les données sont encore limitées, parfois sans concordance et sans rapport au risque d'infection lié au service. La disponibilité présente d'un test immunoenzymatique de troisième génération hautement sensible et spécifique pour doser les immunoglobulines IgG et IgM contre le virus de l'hépatite E, et celle prochaine d'un vaccin recombinant désormais en phase avancée d'expérimentation, ont fourni l'occasion d'évaluer le risque d'infection lié au service.

La recherche a été menée sur les échantillons de sérum des militaires contrôlés au Laboratoire d'analyses du Centre Militaire de Médecine Légale "Alessandro Riberi" de Turin qui ont donné leur consentement informé à la recherche et les informations sur leurs séjours à l'étranger et la conduite par rapport à la nourriture et aux boissons. Sur tels échantillons ont été cherchés les anticorps contre des antigènes structurels immunodominants synthétiques. Le dosage a été réalisé par une méthode ELISA en microplaques.

Le risque s'est révélé extrêmement bas, de façon qu'il paraît suffisant de suivre les comportements conseillés pour éviter l'infection par le virus de l'hépatite E pendant les missions même en pays à haute endémicité.

THE NATO/PFP CELL IN ALBANIA AND ITS MEDICAL AND HUMANITARIAN TASK LESSON LEARNED

Roberto Isabella LtCol MD
ITAF Medical Corps

In September 2000, Lt.Col Dr. Roberto ISABELLA, (M.D.) of the Italian Air Force, was sent to Albania on a NATO mission with the following job description:

"The Medical Team (Task Area 4) will advise the Albanian Military Medical Service (AMMS) on the reconstruction of armed forces medical infrastructure and follow-up the work of the Military Medicine Management Team (field medicine). The Medical Team consisting of Task Area Team Leader, who should remain in charge of the office, and Team's member, who should be expert in the different field of medicine, surgery and military medicine... The team should be prepared to support the Experts (subgroups), to be in Albania for 3 months each... The team should be prepared to support the preparation of medical doctrine, identify additional training requirements and develop and advise on equipment needs... The team should be prepared to support the upgrading of the AMMS to the NATO standards".

This project was already part of the Albanian IPP document (Individual Partnership Program) presented in previous years. There was an emphasis, even back then, on the precarious conditions of the Albanian military sanitary facilities. These facilities have always been, and still are today, used to offer urgent treatment for injured military, foreign or Albanian civilians. In fact, in Tirana, the Central Military Hospital is the national centre for traumas and it is the

only point of reference in the area for the victims of traumas, casualties, burns, poisonings, intoxications, etc.

The reports of previous mission leaders, which have also been published on open sources, bluntly expressed the degrading status, and particular that of the Central Military Hospital - National Trauma Centre.

Below are some significant paragraphs, taken from previously published reports, which describe the situation of the military hospital in Tirana and other Albanian military sanitary structures.

The Central Military Hospital still does not meet any NATO standards of treatment and the hospital is not recommended as a medical base for NATO soldiers. The doctors of the hospital in spite of their professional and medical skills cannot provide a complete service - one of the reasons is the lack of functional equipment of medical supplies.

The Medical Team has not found any Medical Unit of AMMS, which is ready in any activity and which meets NATO standards so far".

The reports listed a long series of NATO incompatibilities in regards to the military sanitary structures. The gravity of these incompatibilities is highlighted even more since, as already pointed out earlier, the Albanian National Trauma Center represents the only center of emergencies for all the nation.

Fig. 2 and 3 clearly illustrate the precarious condition of the most important Albanian Emergency Room during the inspection performed by the Team of the Task Area 4 "Military Medicine" in September 2000.

It was immediately clear, that this situation called for an immediate international humanitarian emergency intervention. Through the reports presented then, the harsh tonality was proportionate to the gravity of the situation. However, these reports lacked concrete suggestions on how to improve this appalling condition in the quickest way possible.

During these types of military medical missions, and also politically humanitarian oriented missions, the harsh tonality in reports can sometimes be productive and induce the correct pro-active effect into finding a solution more quickly. Unfortunately, the budget which the Military hospital depended on at the start of the new year, never exceeded a few thousands of dollars which were mainly utilized to purchase medicines which were quick to run out.

Indeed, considering the conditions of total uneasiness of the Albanian national economy, it was not reasonable to expect a solution based on the local resources.

No government resources could be committed to the instrumentation or to the laboratories.

HEART AND BULLET OR BLAST LESIONS

Fabio Maramao, LtCol MD, (ITA)

This study will have been considering the produced lesions of the heart by bullets or blast. It will point out the principles of surgical therapy paying particular attention to the algorithm of the immediate thoracotomy that is an extreme surgery even if it often represents the only possibility to save these patients with a severe prognosis. The immediate thoracotomy allows to save a variable percentage (from 30 to 50 %) of adults who still have life signs and only the 13% in the case which there are absence of life signs.

In the second part, the author will be dealing about the cardiovascular complications, and their treatments, caused by bullets or blast lesions. Generally speaking, the emergency surgery is always a high risk surgery (association of cardiac death and non-fatal myocardial infarct > 5%). The terrorist actions have as target not only armed forces but also civilians. The presence of cardiovascular pathologies is sure less in the military staff on duty in the theatre of operations since it is selected, while it is sure more frequent in the civilians involved in a terrorist attack. The operating cardiological risk is higher if the patient is affected by cardiovascular pathologies; this type of patient draws benefit from the preoperative cardiological evaluation and the relative treatment. All this is possible in the elective surgery not in the emergency surgery. Therefore a careful intra-operative cardiological control and thorough cardiological management during the post-operative period can considerably reduce the number of cardiac deaths and the number of cardiological complications.

MIMMS : MAJOR INCIDENT MEDICAL MANAGEMENT AND SUPPORT

Walter HENNY Colonel MD
Royal Netherlands Army Reserve (Med Corps)

Upon Completion of this presentation the audience should be able to:
recognize how different professional backgrounds of personnel dealing with major incidents and/or disasters influence their way of thinking and behaviour
understand that effective management of major incidents is impossible without cooperation of many services and agencies
identify the factors that are essential in preparing for such incidents
recognize how the MIMMS course incorporates those factors in an effective training format
A description is given of MIMMS (Major Incident Medical Management and Support Course)
This course aims to bring together personnel that will be involved in dealing with major incidents and disasters: police, firebrigade, medical service (and military)
A systematic approach is explained and taught: Command/Control, Security, Communication, Assessment, Triage, Treatment, Transport.
These "items" are then exercised separately and in conjunction with each other; skill stations, tabletop exercises, field exercise.

WOUNDING MECHANISMS OF MILITARY WEAPONS – DUM-DUMS TO AKS

Peter J. T. Knudsen, Surg. Cdr s. g. RDNR
Danish Defence Health Services

The ingenuity of man to create means of destruction are seemingly boundless, we are the only species of animal which has it in its power to annihilate itself from the face of the earth. But also on a smaller scale man has been using resources, which could have been used for better things, to create deadly weapons. This review covers the transition from the mid-18th century lead bullets to the present day small calibre, high velocity bullet, with an emphasis of the lesions seen from the medical aspect and the laws that have governed them, seen from the legal side. Special coverage is given to the modern time implications of the 1899 Hague Declaration which has had practical consequences in Denmark. The current small calibre rifle ammunition of NATO could to some extent be seen as being in breach of International Law, and this will be discussed at some length.

UNIVERSAL DISINFECTING, DESACTIVATING OR DECONTAMINATING GEL (MOTOR OIL, CHEMICAL, RADIOACTIVE AND BACTERIOLOGICAL AGENTS)

Col. R. Assoc Prof. Kamen Kanev, Brig. Gen. Assoc. Prof. Stoyan Tonev, Col. R.
Assoc. Prof. Dimitar Lekov, Col. R. Assoc. Prof. Velichko Dragnev
Military Medical Academy, Sofia, BULGARIA

There different ways of disinfecting, desactivating or decontaminating of hazardous substances from human skin, especially when tap water or soap is out of reach, without polluting the environment.

The aim of this study is to investigate the disinfecting, desactivating or decontaminating potential of a gel with the code name "Tolekad".

Material and methods: On a surface or skin with dimensions 4/4 cm a hazardous substance of biological, chemical or radioactive origin was applied. Then the "Tolekad" was applied, 3 to 10 minutes, the gel went dry and fell from the surface. Radioactivity, chemical or biological activity was measured afterwards. For the purpose of the study were used radioactive iodine, petroleum, E. coli, Yersinia pestis and Antrax bacteriophag.

Results: The decontaminating effect towards petroleum was 72%. The desactivating effect towards radioactive iodine was 85%. And disinfecting effect towards E. coli 95 – 99%; towards Yersinia pestis was 68 – 95% and towards Antrax bacteriophag 138 – 98 – 99%. No side or allergic reaction from the skin was observed.

In conclusion, the preliminary studies of the disinfecting, desactivating or decontaminating potential the gel with the code name "Tolekad" shows no side or allergic reaction from the skin. On the other hand, the decontaminating effect towards petroleum; the desactivating effect towards radioactive iodine and disinfecting effect towards E. coli , towards Yersinia pestis and towards Antrax bacteriophag 138 prove to be quite promising and further investigations should be conducted.

EXPERIENCE OF A FRENCH NURSE IN KOSOVO FOR KFOR

Monocomble Benedicte, ICNR
Service de Santé des Armées (FRA)

Presentation of my experience as French reservist Nurse in 2 missions on the territory of Kosovo in November 2003 to February 2004 and the second time from July 2005 to September 2005 in favour of the ONU for the KFOR.

Presentation of the French hospital in Mitrovica, presentation of the medical team and of the work we do for all the military on and out the base and for the civilian population.

BLOOD TRANSFUSIONS IN EXCEPTIONAL SITUATIONS” « TRANSFUSION SANGUINE EN SITUATION D’EXCEPTION »

J-P. MOULINIE Colonel MC, (FRA)

Recent changes in blood transfusion practices and regulations have made it necessary to define the ways in which metropolitan hospital transfusion practices may be adapted to meet war zone requirements. Such adaptations are mandatory because of the special circumstances typically encountered in supplying and managing the environment in which medical care must be provided. At any rate, the underlying purpose of the [French] National Health Service continues to be to ensure that the wounded—regardless of the circumstances—receive the type of medical care best suited to save their lives and prevent any sequelae. These adaptations should take into account the problems encountered in complying with the good practices defined in the various sets of standards—rules which must be carried out as soon as they can be implemented.

Any intensive care physician assigned to a surgical unit or medico-chirurgical team (or, in broader terms, any doctor dispatched on special assignment) may, in the course of an external operation (OPEX),¹ need to transfuse a wounded patient with some whole blood samples collected locally from his fellow soldiers. This situation can only be contemplated after all normal supply channels have failed (for example, in the absence of controlled air space), or when healthcare needs far exceed available resources. A similar situation may be encountered under other circumstances, such as in seagoing ships with no means of evacuation. Likewise, any unit doctor dispatched to an external operation may have to conduct a medical interview to obtain a blood donation, or even to draw a unit of blood for transfusional purposes.

Transfusion: the primary concern in exceptional situations

A blood transfusion in an exceptional situation can be defined as a transfusional procedure that is required when labile blood products (LBP) are not available from the normal supply source. It requires the use of whole blood collected on-site. This process is only contemplated in situations of isolation created by operational conditions (such as in the absence of controlled air space) or in the event of a mismatch between needs and resources

¹

(massive influx of wounded, or gravely wounded, patients) for surgical units or medico-chirurgical teams for military forces in OPEX, and for seagoing ships.

The use of whole blood collected on-site should only be contemplated after exhausting all other methods to optimise available resources, notably:

- by performing an early initial haemostasis, and as complete a surgical haemostasis as possible;
- by electing to perform a per-operative autotransfusion, since suitable devices are available in all front-line surgical facilities;
- strict inventory management of red blood cells originating from the [French Army] Blood Transfusion Centre (CTSA).²

When all resources have been exhausted, the use of whole blood is justified by the need to preserve the blood's oxygen-carrying capacity. A haemoglobin level of 70 g/L is a reasonable limit. However, this threshold may be temporarily reduced, particularly in a young wounded patient, and especially if he is amply oxygenated, or even intubated and mechanically ventilated with high inspired O₂ fractions, and isovolemic, with no uncontrolled active bleeding.

Performing a transfusion under these special conditions is not covered by the common rules defined in the [French] Public Health Code concerning blood safety. It must be justified by the circumstances. It cannot be improvised in response to a need to act, but, to the contrary, must follow a perfectly defined organizational procedure to be implemented as soon as circumstances require.

Pre-transfusion blood donation screening tests will be limited to those which can be deployed, and will include, at the very least, an HIV serology rapid test. Only blood samples which this test finds to be negative will be used. This policy may be subsequently extended, depending upon the options offered by the rapid diagnosis.

Only military units which are extremely limited in terms of medical personnel and equipment, without access to reagents (airborne surgical unit teams, when their base is first set up, for example), and which have no other alternative solution, may use the blood donations collected on-site without a serology test. Without exception, the traceability components will be reported on the simplified interview form.

BEHAVIORAL DYNAMICS OF RELIGIOUS MILITANCY AND VIOLENCE

Robert D. Parlotz Ch Col USAF (Ret)

Contemporary, observable dynamics of violent behavior exhibited by religious militants will be explored. The focus will be on human development, object relations, reactions to perceived threat, world view, and resilience. Historical examples of various groups of religious militants will be identified, Dynamics of resistance to intervention also will be identified. Differentiation between "learning problems" and "problems-about-learning" will be examined.

BATTLEFIELD ACUPUNCTURE: A NEW APPLICATION OF AN ANCIENT ART

Arnyce Pock, Colonel MD, USAF

Acupuncture is an art that has existed for at least two, and perhaps as many as four millennia. It has been effective in the amelioration of acute and chronic pain syndromes, and has been used by generations of “barefoot doctors” throughout China. We believe this ancient practice can be effectively applied to the modern battlefield.

This presentation will focus on the use of a specific form of acupuncture (auricular acupuncture) for the rapid relief of pain in potentially hostile and/or austere environments. Situations in which time and the preservation of situational awareness (by a wounded soldier) can be crucial to survival and mission accomplishment.

A specific, algorithmic approach using the French [Sedatelec®]“Aiguille Semi-Permanente” (ASP) needles will be discussed. Use of these techniques in an emergency room setting have shown that the initial pain attenuation may equal that of narcotic analgesia, but without the associated side effects.

In summary, battlefield acupuncture represents a modern application of an ancient Chinese technique.

REAL WORLD TRAUMA TRAINING FOR THE ARMY RESERVES

MG Robert J. Kasulke USAR
MG Deputy Surgeon General, Reserve Affairs

I will discuss the development of a trauma training program that was started to expose our clinicians, both officers and enlisted to real world trauma at a world class trauma training institute, Kings County hospital in Brooklyn, New York., at no expense to the Army. Included in the discussion will be the negotiations and agreements in the start up and the continuation of this program, and also the benefits to our attendees, whether or not they are practicing clinicians in their civilian occupations. Also, the benefit of this type of training to those injured in combat when our attendees get mobilized. This program has been in existence for slightly over two years and has been used to train a little more than 200 attendees.

CONTINUOUS HEALTH SERVICES TRAINING IN AN OPERATIONAL THEATRE

Roger L. Scott, Major, (CAN)
Deputy Commanding Officer, 15 (Edmonton) Field Ambulance

Contemporary deployed medical units in the Canadian Forces and other militaries are often drawn from formed units with a large number of augmentee personnel from other units “just in time” for deployment to an operational area. The lack of lead time for a team to practice together makes it necessary for continuous training during predeployment training and in the theatre to ensure teams experience working together and develop the rhythm necessary for optimum care. This presentation will review the experience of the Canadian Forces Task Force Kabul Rotation § Health Services Support Company’s training model before and during deployment with ISAF in Kabul, Afghanistan.

THE ROLE OF PLASTIC AND RECONSTRUCTIVE SURGERY IN THE MANAGEMENT OF BATTLEFIELD CASUALTIES

Mark R. Thibert, Major; (CAN)
OC Med Coy 18th Field Ambulance, Thunder Bay Ontario Canada

The surgical care of battlefield casualties does not end with the initial resuscitation and early trauma surgery. With the availability of Military Plastic and Reconstructive Surgeons, the injured soldiers have access, through Plastic and Reconstructive Surgery, to care which will allow in many instances more functional recovery from their injuries, and a larger degree of limb salvage.

The techniques that gave birth to modern day Plastic Surgery arose from the many complex injuries that have resulted from war injuries throughout history. Further enhancements of these procedures have now led to extremely sophisticated Plastic and Reconstructive Surgery Techniques that have promoted earlier recovery, restoration of function, and salvage of extremities.

The specialty of Plastic Surgery is involved in a great many areas of battlefield management. These include burns, craniofacial and maxillofacial trauma, hand and upper extremity injuries, lower extremity reconstruction in conjunction with modern complex orthopedic procedures, nerve reconstruction, soft tissue reconstruction, and management of complex acute and chronic soft tissue infections. The Plastic Surgeon works closely with the General Surgeon, Orthopedic Surgeon, Oral Surgeon, Neurosurgeon, and Dental Surgeon, to name a few.

Due to the complexity of modern day Plastic Surgery procedures, it is paramount that there is a clear understanding of the role, scope, and timing of involvement of the Plastic Surgeon in the management of battlefield casualties. Through this carefully orchestrated team approach, injuries sustained by today's troops can be managed at a higher level with the prudent use of the Plastic Surgeon to increase the ability for early healing, improved function, and a higher degree of limb salvage.

THE SONOGRAPHIC EVALUATION OF THE ACHILLES TENDON IN ARMY RECRUITS – A PROSPECTIVE STUDY

Savage S, Gane A , Major, (GBR)
Royal Army Medical Corps

There is evidence that army recruit training could cause overuse injury to the Achilles tendon and following animal models and previous studies it is expected that the Achilles tendon will enlarge when exposed to regular exercise.

Aim

The aims of this study were:-

1. To demonstrate overuse injuries in the Achilles tendon in a cohort of army recruits using diagnostic ultrasound.
2. To observe the range of detectable changes in the measurement of the Achilles tendon before and after military training.

Method

A simple pre test-post test prospective panel design was used to evaluate the Achilles Tendon of Army recruits. The cohort of recruits was scanned at the beginning and towards the end of basic military training. The tendon was measured at three levels along its length and was further evaluated for the presence of over use injury.

Results

The Achilles tendon did demonstrate thickening throughout its whole length, however only the proximal regions of the tendon demonstrated statistically significant thickening. Only three recruits demonstrated ultrasound appearances considered to be associated with overuse injury. Such a small incidence within this cohort proved not to be statistically significant.

MALARIA IN THE UK FORCE PROTECTION IN SIERRA LEONE 2002

Rod Pascoe, Major RAMC (v), (GBR)

There was an increased incidence of Malaria amongst our Force Protection Troops in Sierra Leone while I was the MO March – June 2002. Having looked into the cases in our troops I also looked at the cases in the Jordanian UN Field Hospital staff. Maj Ken Roberts and Capt. Sam Bracebridge from Army Medical Services UK came out and did an extensive study into the possible causes. It seemed that there may have been a slight reduction in mefloquine effectiveness, but it was still the best drug, that certainly reduced the severity of infection in those it did not prevent. Some climate change with earlier rain highlighted the need for careful bite prevention.

DEALING WITH THE RISKS OF AVIAN INFLUENZA IN GERMANY 2005-2006

H. Salisch, (DEU)
Bavarian Animal Health Service

Avian flu is caused by pathogenic orthomyxoviruses. Starting December 2003 in nine Asian states a special strain called Influenza Virus type A H5N1 Asia has spread to the east. It has been isolated from migratory birds, domestic wild birds and poultry in 45 countries on three continents so far (Asia, Europe, Africa). Totally until May 2006 mostly in Asia 208 persons got serious illness after infection due to close contact with sick poultry or dead bodies, and 115 persons have died. In February 2006 the zoonotic strain H5N1 Asia reached wild bird population in central Europe, but only few poultry flocks including one in Germany were affected and had to be culled.

VATS (Video Assisted Thoracic Surgery) REMOVAL OF A BULLET IN THE RIGHT LUNG

Angelo Maria Calati, Major MD
Sanivet (Medical Corps) Italian Army

A 19-year old Iraqi girl had for 6 years a bullet in her right lung, near the hilum. X-ray controls showed that the extraneous body had been moving, about 2 cm in 3 months. The Author visited the patient during his mission in Iraq but he couldn't be able to operate the girl in the field hospital of the Italian Army Base (Camp Mittica, near to an-Nasiriyah). So the author, returned to Italy, organized with the Italian CIMIC Centre Iraq the Medevac to transfer the patient to the civilian hospital in Milan where he usually works. The patient was operated with success and came back home in Iraq 3 weeks later. The Author shows a 8' film of the operation, performed with minimally invasive access (Video Assisted Thoracic Surgery, VATS), that is very unusual in such a situation.