

Psychiatrie militaire à l'avant "Une perspective dynamique dans les armées françaises"

C. LE ROUX, VALLET

La doctrine de prise en charge des troubles psychiques en situation opérationnelle est aujourd'hui bien établie. Dans la perspective des principes établis par le psychiatre américain Salmon en 1917, elle s'est affinée au cours des conflits majeurs qui ont marqué le XX^e siècle. A la lumière des engagements récents des forces françaises durant les quinze dernières années, ces principes ont montré leur pertinence encore actuelle, mais aussi leur évolution. La participation opérationnelle de psychiatres militaires français lors de la guerre du Golfe en 1991, puis sur les différents théâtres d'opération en ex-Yougoslavie, ou encore récemment en Côte-d'Ivoire a permis d'en mesurer l'efficacité, au-delà de la perspective, parfois réductrice, du stress retenue dans les classifications nosographiques actuelles (DSM IV et CIM 10). Aujourd'hui les sections médico-psychologiques font partie intégrante des hôpitaux mobiles de campagne. Leur composition en personnel et leurs moyens logistiques de fonctionnement sont réglementairement définis. Articulées aux structures sanitaires de rôle deux ou de rôle trois, elle peuvent, en situation de conflit, être déployées à la demande. Mais au-delà de la perspective éventuelle d'engagement militaire de grande importance, les unités de l'armée française interviennent le plus souvent dans des situations de crise. La qualité de l'hygiène mentale de ses unités est un facteur essentiel du déroulement de la mission. Dans ce domaine, la place du psychiatre militaire "à l'avant", en particulier durant les phases les plus actives de l'intervention, peut s'inscrire dans une dynamique d'intervention individuelle ou collective qui s'approche au plus près des difficultés psychologiques, voire psychiatriques, que peuvent rencontrer les combattants en opération. Cette proximité de l'intervention du psychiatre au plus près des questions du sujet peut créer les conditions d'une rencontre dont la valeur thérapeutique est très importante. Cette perspective dynamique nécessite une évaluation permanente de la situation sur les différents théâtres d'opération et une réactivité importante de la projection du psychiatre "à l'avant" dans une collaboration étroite entre le commandement et le service de santé.

Curriculum vitae du Médecin en chef ® LE ROUX

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 l'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 2004. Vice Président du Comité F.A.

Curriculum vitae du Médecin en chef VALLET

Psychiatre, Professeur agrégé du Val-de-Grâce dans la chaire de psychiatrie et d'hygiène mentale dans les armées, il occupe actuellement les fonctions de chef de service adjoint de la clinique de psychiatrie de l'hôpital d'instruction des armées du Val-de-Grâce à Paris. Il a participé à trois séjours opérationnels au sein de formations sanitaires de l'avant en Bosnie en 1995 et 1997 et au Kosovo en 2001. Au-delà de cette expérience opérationnelle, il est régulièrement confronté, dans sa pratique clinique quotidienne, à la prise en charge des patients présentant des pathologies aiguës ou différées en relation avec l'engagement opérationnel. Il participe à l'enseignement de psychiatrie au profit des élèves officiers médecins de l'Ecole d'application du service de santé des armées, dans le cadre de leur dernière année d'études médicales. Il est en charge de la coordination nationale de la préparation des médecins généralistes militaires candidats aux concours de spécialisation de psychiatrie. Il participe, en collaboration avec le Centre des relations humaines de l'armée de terre, à l'élaboration des modalités du soutien psychologique des militaires en opérations extérieures. Il partage depuis plusieurs années les travaux du groupe de travail de psychiatrie militaire du COMEDS de l'OTAN.

Maintenance of a correct relationship between therapeutic efficacy and costs of plasma substitutes: a clinical study in patients undergoing major vascular surgery
Francesca PRINCIPI, Q. PIACEVOLI

Cost efficacy, cost effectiveness and the cost of every product used in clinical practice are the criteria on which the correct choice of one product rather than another is based. However, with equal therapeutic efficacy, choosing a product with a lower unit cost is not necessarily the correct choice. We compared two of the products used in the treatment of plasma substitution, from the point of view of cost and therapeutic efficacy in order to identify which of the two was most advantageous.

Methods: A total of 72 patients who had to undergo major vascular surgery were enrolled. After being informed of the aims of the study (written informed consent), they were randomly divided into two groups, one treated with a solution of VOLUVEN® 6% with medium molecular weight (MW 130/0.4 kDa), the other with a solution of modified fluid gelatin (MFG) 4% (MW 30 kDa).

The solutions were administered to the patients from the start of the operation until the morning of the first post-operative day, with the aim of maintaining a mean arterial pressure (MAP) higher than 75 mmHg and central venous pressure (CVP) between 10 and 14 mmHg. The costs of the two products and their accessory costs, taken from the supply lists of the hospital pharmacy, were also taken into consideration.

Results: There were no significant differences between the groups as far as therapeutic efficacy is concerned. From the financial point of view, despite the higher unit cost of VOLUVEN® 6% MW 130/0.4, the total cost of the entire infusion therapy was very similar between the groups.

Conclusions: The higher unit cost of the hydroxyethyl starch 6% MW 130/0.4 (VOLUVEN®) was compensated for by the fact that less solution is needed to achieve the same hemodynamic parameters guaranteed by the gelatin.

Brief Biographical Details of Author (s)

Principi Francesca.

Degree in Medicine at the University “La Sapienza” of Rome (Italy) on October 29th, 1984, Degree in Anaesthesiology at the University “La Sapienza” of Rome (Italy) on July 1st, 1987; assistant of anaesthesia at Anaesthesia and ICU Department of Army General Hospital of Rome (Italy)(1987-88); assistant of anaesthesia at Day Surgery Department of “Umberto I” General Hospital of Rome (Italy) (1988-89); assistant of anaesthesia at Anaesthesiology and ICU “Umberto I” General Hospital of Rome (Italy) (1989-90); consultant anaesthesiologist at Anaesthesia Department of “Regina Elena” Cancer Institute of Rome (Italy) (1990-todate); teacher of Pharmacology and Anaesthesiology at “Paolo Nazzaro” Nursing School in Rome (Italy), (1995-1998); “1° Master A.A.R.O.I. (Italian Hospital Anaesthesiologists and Resuscitation Association) - Regione Lazio - Management training course” hold in Rome on June 24th, 1995; “ABC of Applied Statistics in Medicine”, hold during 10th Postgraduate Course in Critical Care Medicine A.P.I.C.E. ‘95, Trieste (Italy), 13-15 November 1995; “1st Medicine economic training course”, Rome (Italy) 3-10-16-24 May 1996; “Intensive course of managerial training”, hold by A.A.R.O.I. (Italian Hospital Anaesthesiologists and Resuscitation Association), Rome (Italy), (Sept-Dec 1998); Author and Co-Author of 55 abstracts, scientific papers, and contributors of some medical books.

Piacevoli Quirino

Degree in Medicine at the University “La Sapienza” of Rome (Italy) on, 1973, Degree in Anaesthesiology at the University of Cagliari (Italy), 1977; Professor at Department of Anaesthesia and Intensive Care S. Filippo Neri Hospital, Rome (Italy); Teaching Professor at the University of Campus Biomedico Rome (Italy); Director of Master in Health Economics; President of Scientific Society of Clinical Risk Management; President of scientific Society of Total Endovenous Anaesthesia; President of Italian Hospital Anaesthesiologists and Resuscitation Association (AAROI); Author of over 100 scientific reviews and papers.

Military psychiatry - future tasks

P. W. JEPSEN

Written just after the Korean War the story of classical military psychiatry is the story of a success. The story was that given the proper treatment 80% or more of mass casualties suffering from a combat related mental breakdown could be cured within a few days. This was just the news needed in a cold war with few if any reserves in manpower on the Western side. The cured mental casualties were the potential reserve in manpower. Fortunately the Cold War never became hot. So we will never know if the story was true. But looking back, what were the facts behind the story? Late in The First World War Salmon introduced the concept of forward psychiatry. However, we know very little about possible effects of this intervention. Salmon also introduced the concept of 'preventive psychiatry' meaning pre-deployment selection of personnel by psychometric measures with the purpose to deselect future mental breakdowns. Used for the first time in large scale in the beginning of The Second World War, preventive psychiatry turned out to be a failure and for this reason the Allied Armies reintroduced forward psychiatry. Although there was certainly a tendency that the number of mental and physical mass casualties varied with the roughness of combat, there was only limited evidence for the effect of acute psychiatric intervention. We have only limited data from The Korean War and as of The Vietnam War data are inconclusive. However, the conclusion might very well be that the story of classical military psychiatry is too good to be true.

But there is another story. In modern Western warfare there is a limited number of casualties and no mass casualty situations. A significant fraction of veterans, however, develops post deployment syndromes, the nature of which remains at least partially obscure. These disorders give rise to significant morbidity. The so-called Gulf War syndrome is an example. It seems that every major war has produced a similar syndrome of its own. Most of these veterans do not fulfil the diagnostic criteria for PTSD and it remains to be proved that these disorders are long-term consequences of combat stress or cumulated stress. These veterans claim to have a psychical disease rather than a mental and typically they relate their disease to environmental combat factors rather than to stress. It is the challenge of future military psychiatry to address these complicated questions. The main task of future military psychiatry may no longer be to handle mass casualty situations during combat but to diagnose and offer treatment to veterans with post deployment disorders.

Brief Biographical Details of Author

Major (R) **Peter W. Jepsen** M.D., Ph.D., who is consultant psychiatrist at the National Hospital in Copenhagen and official Danish representative on the COMEDS WG on Military Psychiatry.

The Canadian Forces Health Care System : the Progressive Implementation of a New Model of Practice in Physiotherapy

L.J. HÉBERT^{1,2,3}, P. ROWE¹

¹ Canadian Forces Medical Group, National Defence, and ³ Health Services Primary Reserve List, Ottawa, Canada, and ² Faculty of Medicine, Université Laval, Quebec

A new model of physiotherapy (PT) practice in the Canadian Forces (CF) is being progressively implemented. This model, based on the CF PT vision-mission of the 21st century, was developed while considering the unique characteristics of the military, different provincial legislations, and with the goal of optimizing the effectiveness and quality of our military health care system. This model has 5 characteristics: a. an evidence-based practice promoting early intervention, prevention, direct access with a priority system and the use of validated outcome measures; b. national standards for training, national policies and standard procedures for PT care and practice; c. an active professional communication network; d. a PT research program on musculo-skeletal injuries (MSKI); and e. the use of a CF PT database (surveillance/management tool) to determine the impact of MSKI and current rehabilitation/PT interventions. The result is promising and would benefit other organizations dealing with similar needs and constraints.

Brief Biographical Details of Author (s)

Major **Luc J. Hébert**, PhD, PT

Directeur national de l'entraînement en physiothérapie / National Physiotherapy Training Director

QG GMFC - Prestation des soins de santé / CFMG HQ - Health Services

Major Luc J. 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 as physiotherapist 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 about 15 major papers and more than 50 abstracts. He taught at the Montreal University from 1987 to 1992 and is teaching at the rehabilitation department at l'Université Laval since 1990. He is also adjunct professor at the radiology department of the Faculty of medicine at l'Université Laval where he also occupies the function of Director of research and development.

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 unique expertise in the assessment of upper limb MSK pathologies using three-dimensional motion joint analysis systems and novel imaging procedures such as intervention magnetic resonance imaging techniques. He received several research funds as principal investigator and co-investigator.

Since May 2000, Major Hébert is the National physiotherapy training director for the Canadian Forces Medical Group Headquarter, Health Services delivery.

L'utilisation de l'Imagerie de Résonance Magnétique d'Intervention : une technologie novatrice en plein développement et dont les applications sont très prometteuses

L.J. HÉBERT^{1,2,3}, H. MOFFET^{4,5}, M. DUFOUR⁶, C. MOISAN⁶, A. BRANZAN-ALBU⁷, D. LAURENDEAU⁷

¹ Groupe Médical et ² Cadre de la première Réserve des Services de Santé, Forces canadiennes, Ottawa; ³ Radiologie et ⁴ Réadaptation, Faculté de médecine et ⁷ Laboratoire de Vision et Systèmes Numériques, Génie électrique et informatique, Faculté des sciences, Université Laval, Québec; ⁵ CIRRS et ⁶ CHUQ-Unité d'IRMI, Pavillon SFA, Québec

L'Imagerie de Résonance Magnétique à champ ouvert, appelé IRM d'intervention (IRMi), est une technologie révolutionnaire qui permet maintenant de visualiser les structures osseuses et leurs déplacements. En utilisant un système d'IRM 0.5 Tesla SIGNA-SP™ à champ ouvert, nous avons conduit une série de travaux de recherche et vous présenterons les résultats concernant: a. le développement d'un protocole permettant d'obtenir une mesure 2D valide et fidèle de la distance acromio-humérale (DAH) à l'épaule ; b. l'utilisation de l'IRMi chez des sujets sains (n=29 épaules) et des sujets ayant un syndrome d'abutement de l'épaule (n= 41 épaules) et chez qui la DAH a été mesurée en position assise, l'épaule au repos et à plusieurs angles d'élévation en flexion (50° à 130°) et en abduction (70° à 110°) ; et c. la plus récente étape de nos travaux soit le développement d'une nouvelle méthode permettant la reconstruction 3D des structures osseuses composant les articulations gléno-humérales et acromio-claviculaires à partir d'images obtenues par IRMi.

Brief Biographical Details of Author (s)

Le major **Hébert** est physiothérapeute au sein de la Première Réserve des Services de Santé des Forces canadiennes. Il a été officier physiothérapeute dans la Force régulière de 1982 à 1996, période au cours de laquelle il a occupé différents postes au Canada et outre-mer. Après sa formation de physiothérapeute à l'Université de Montréal en 1982, il a complété à cette même université des études de maîtrise en sciences biomédicales en 1989. Il a aussi complété en mai 2001 des études doctorales en Médecine expérimentale à l'Université Laval. Le major Hébert a collaboré à la publication d'un chapitre de livre, publié une quinzaine de manuscrits et une cinquantaine d'abrévés. Il a été chargé d'enseignement à l'Université de Montréal de 1987 à 1992 et enseigne au département de réadaptation de l'Université Laval depuis 1990. Il est aussi professeur associé au département de radiologie de la Faculté de médecine de l'Université Laval où il cumule également la fonction de Directeur de la Recherche et Développement.

Il est chercheur avec le Réseau provincial de recherche en adaptation-réadaptation du Québec. Ses travaux portent notamment sur l'étude des facteurs explicatifs et prédictifs des pathologies musculo-squelettiques chez les militaires et des facteurs limitant leur performance ainsi qu'au développement d'une expertise de pointe dans l'évaluation des pathologies au membre supérieur avec l'utilisation conjointe de mesures d'analyse tridimensionnelle du mouvement et de systèmes d'imagerie tel que la résonance magnétique d'intervention. Il a obtenu plusieurs subventions à titre de premier demandeur et co-demandeur.

Le major Hébert occupe, depuis mai 2000, le poste de Directeur national de l'entraînement en physiothérapie au sein du Groupe médical des Forces armées canadiennes.

Survey of theatre cases in a Balkans peacekeeping hospital

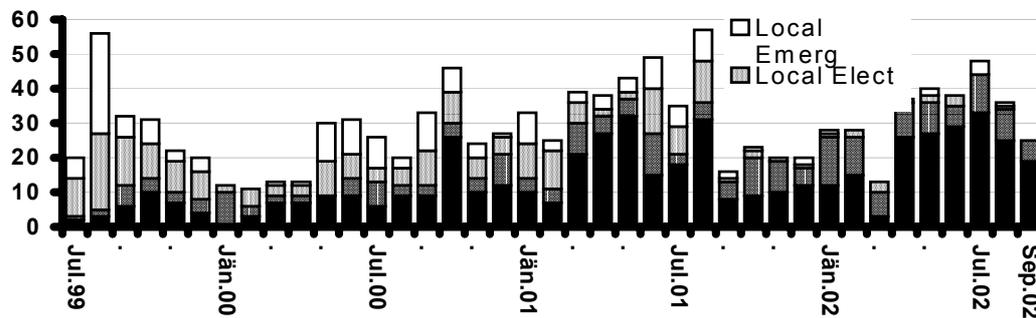
A.S. LAURENCE

Task Force Medical Falcon, Bondsteel Camp Hospital, Kosovo, Former Yugoslavia. The medical facility at Bondsteel serves 15,000 KFOR multinational peacekeeping military personnel, as well as emergency treatment for the immediate local population. It is US based with a contingent of UK personnel. Theatre records from Mid July 1999 were scrutinised and as much anonymised data as possible abstracted.

A total of 1161 theatre cases took place between July 99 and Sept 02. The incidence of emergency cases (as defined in the theatre records) changed over time and season, as did the proportion of non-NATO patients.

There were 5 or more cases in a single day on 13 occasions. On 6 occasions, both theatres were in heavy use at the same time. This was usually due to multiple casualties from an incident. Five deaths on the table could be identified, all from major trauma.

Figure: Theatre Cases Month by Month, July 1999 to September 2002.



Case mix (trauma/gunshot/mine versus routine cases) changed as local unrest diminished and civilian infrastructure improved. The cases were almost entirely elective NATO by the end of the study period.

Brief Biographical Details of Author

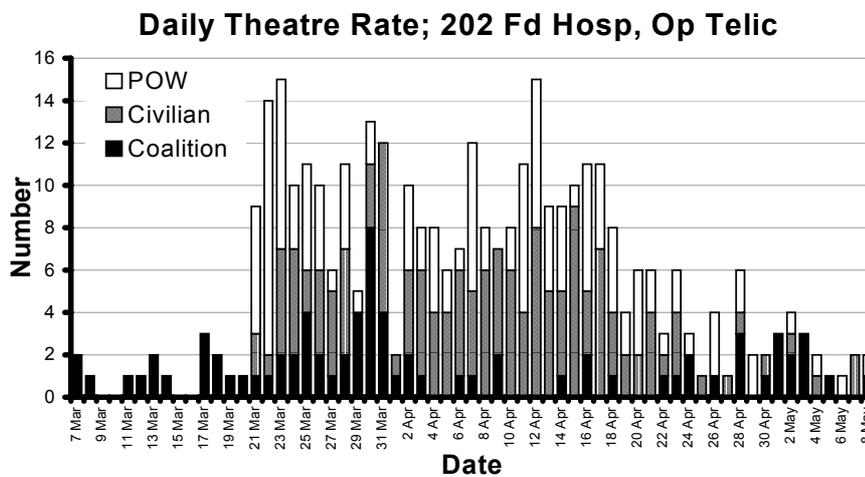
I have been a Consultant Anaesthetist in Preston, UK, for 19 years, with a particular interest in daycase anaesthesia, neuroradiology, sedation and research. I have been in the Territorial Army reserve forces for 15 years, currently as the rank of Lt Col, and had completed two peacekeeping tours in the Balkans prior to being called up for Op Telic One.

Theatre workload in a reserve forces Field Hospital during op Telic 1

A.S. LAURENCE

The British 202 Field Hospital, staffed almost entirely by reserve (TA) forces was deployed 30 miles south of the Iraq/Kuwait border to support Coalition forces during Op Telic 1. Arrival of personnel in theatre to staff the hospital was within 20 days of callout; the ground war started three days later.

From the first day of the ground war casualties were from combatants but also many civilians caught up in the fighting. Although most coalition casualties were repatriated home after initial stabilising surgery, Iraq nationals often had several returns to theatre. During the 63 day life of the hospital, 352 cases (189 patients) came to theatre, of whom 77 were coalition, 130 Iraq combatants and 145 civilians (including 49 children age 6 month to 15 yr. Thirty five serious burns cases were treated, all with multiple returns to theatre.



Initially, we were not expecting the large number of civilians, especially burns and children, but we were well staffed and carried a considerable range and depth of clinical experience from our civilian practice.

Brief Biographical Details of Author

I have been a Consultant Anaesthetist in Preston, UK, for 19 years, with a particular interest in daycase anaesthesia, neuroradiology, sedation and research. I have been in the Territorial Army reserve forces for 15 years, currently as the rank of Lt Col, and had completed two peacekeeping tours in the Balkans prior to being called up for Op Telic One.

Early Detection of testicular tumors in young men

H.C. ROEMER, M. VON KATHEN, W. SCHOEPS W, K. GOLKA

Institute for Occupational and Environmental Physiology at the University of Dortmund

Testicular cancer, the most common malignancy in young men, has increased world-wide for decades. Upon now, in Germany the physical inspection for military service is the only examination in young men which includes inspection and palpation of the testes routinely.

Within 15 years (1983-1998), physicians assumed testicular tumours in 8,285 cases on the occasion of the inspection of military service in 4,266,572 mustered 19-year-old men. The acceptance of the physical examination of the testes during muster is high. Furthermore, different benign diseases of the testes had been diagnosed.

The main problem in screening for testicular cancer is to reach the target group. Prevention by early detection of testicular tumours could be performed routinely by military surgeons, general practitioners, doctors for sports medicine, and specialists in occupational medicine.

Biographical data

Born: 20 March, 65, Hagen i. Westf. (NRW)

Adress: Am Stadgarten 18, 45276 Essen, Germany

Civilian education:

89 - 97 Study of Medicine and Philosophy at University of Essen

97 - 99 Internship

99 - 00 Scholarship Toxicology, "Deutsche Forschungsgemeinschaft"

01 - 02 Internal medicine

02 - 04 Occupational and Environmental Medicine, Institute for Occupational Physiology at the University of Dortmund

Military Assignments:

85 - 87 24 months (conscript) NATO HQ Rheindahlen

87 - 92 Qualifying as reserve officer, Airforce infantry

92 - 97 Activities in the Reserve (Captain (R))

97 - 01 Switch to MC (Captain MC (R))

Tutor at the Medical Academy of the German Armed Forces, Munich

Medical Surgeon NATO E3A Geilenkirchen (Maj MC (R))

02 - 04 Institute Pharmacology and Toxicology at the Medical Academy of the German Armed Forces (Maj MC (R))

LE SUICIDE ET LES TENTATIVES DE SUICIDES AU SEIN DES FORCES ARMEES CANADIENNES, REALITE ET INTERVENTIONS

J. LALANDE, M. SARTORI

Nous avons entrepris une recherche dont les buts collectif et communautaire s'inscrivent dans un programme d'aide aux militaires des Forces Armées canadiennes.

L'objectif est d'analyser l'incidence des tours concernant les tentatives de suicide et les suicides chez nos militaires canadiens.

Notre recherche doctorale sera centrée sur le mal qui est à l'origine de nombreux suicides dans les secteurs civil et militaire. Ainsi, nous allons conceptualiser deux auto-questionnaires qui devront être complétés par tous ceux et celles qui reviennent de mission. Or, certains cliniciens utilisent un éventail d'outils qui sont excellents, mais malheureusement ne sont pas représentatifs de la réalité militaire.

Ainsi, il nous apparaît sage d'entreprendre une recherche exhaustive afin de concevoir un outil de dépistage à jour qui permettra de découvrir de manière efficace ceux et celles qui souffrent de dépression et qui sont potentiellement à haut risque de commettre une tentative de suicide ou un suicide, cela afin de prévenir de telles tragédies.

Détails biographiques concis des auteurs

Capitaine Michel Sartori:

Je me présente, Michel Sartori. Je me suis enrôlé dans les Forces canadiennes le 24 janvier 1985 où j'ai été assigné au GPM 031 (Fant). J'ai, par la suite, complété avec succès mon cours de base et été muté au ICDO Petawawa. En septembre 1986, j'ai participé à ma première mission des Nations Unies à Chypre. En mai 1993, j'ai fait partie du déploiement du 1 R22^eR et du 12 RBC en Bosnie Herzégovine où j'occupais le poste de commandant de section anti-char. À mon retour, j'ai entrepris et terminer mon baccalauréat en théologie, à l'Université Laval. Le 23 mars 1999, j'ai été reclassé dans le GPM 48 officier d'administration du Service de la santé. Le 3 septembre 2001 j'ai été promu Capitaine. Toujours attiré par les problèmes sociaux, je présente une demande d'admission au deuxième cycle en intervention sociale à l'Université du Québec à Montréal à l'automne 1999, accompagné de mon projet de mémoire sur le Stress post-traumatique et vide existentiel chez les militaires des forces canadiennes. Ayant complété avec succès une année de propédeutique, je suis admis à la maîtrise en septembre 2000 et j'ai déposé mon mémoire le 10 décembre 2002. Le 23 avril 2003, j'ai terminé le programme de certification du Collège canadien des directeurs de services de santé (CHE). Présentement, je suis en démarche au Programme de Cotutelle entre l'UQAM et l'université de Toulouse en France pour la rédaction d'une thèse de doctorat sur la problématique du suicide dans les Forces armées canadiennes. Je suis actuellement employé comme officier des opérations et Capitaine-adjutant de la 17^e Compagnie Médicale à Winnipeg.

LtCol Jacques Lalande

Depuis mon enrôlement en 1980, j'ai occupé de nombreux postes dans les Forces Armées canadiennes ; entre autres, au sein d'une Ambulance de campagne, de quartiers-généraux de brigade, de secteurs ou au niveau national. Psychothérapeute de formation, je possède une vaste expérience en relations humaines, comme psychothérapeute, formateur, concepteur de programmes d'enseignement et enquêteur. Cette expérience a été acquise dans les milieux suivants : militaire, civile, carcéral et école de formation en psychothérapie.

Par exemple, à titre de : Commandant de la 51^e Ambulance de Campagne de Montréal; Formateur et enquêteur pour la cellule G1 au quartier général du Secteur Québec de la Force terrestre (SQFT); Fondateur et administrateur du Centre de psychothérapie du Plateau Mont-Royal à Montréal; Psycho-éducateur au Centre de Relation d'aide de Montréal. Mon travail consistait à rencontrer et encadrer individuellement trente (30) étudiants; Formateur dans une prison fédérale où j'y ai supervisé et dirigé des détenus. Je travaille actuellement à Ottawa, au Quartier général des services de Santé des Forces canadiennes. Dans le cadre du projet RX2000, je supervise 15 militaires dans le but de restructurer les services de santé de la Réserve des Forces Armées canadiennes. J'ai étudié dans les domaines suivants: Relation d'aide, Relations humaines, Relations industrielles, Violence et société, Leadership et Instruction avancée militaire. Je poursuis actuellement mes études pour l'obtention d'un diplôme de 2^e cycle (DESS - Diplôme d'études supérieures spécialisées) en santé mentale.

Les hépatites virales (A, B, C et E) en ce qui concerne le personnel militaire d'années différentes.

DI VINCENZO G., BIANCOTTI P. P., SARNO G.

Servizio Sanitario Nazionale – Regione Piemonte, Ospedale San Giovanni Battista di Torino,
Centro Militare di Medicina Legale A. Riberi di Torino

Les hépatites virales constituent un risque important pour la capacité opérationnelle et pour la santé du personnel militaire, surtout quand l'on effectue des missions qui se déroulent dans des pays à incidence élevée des hépatites.

On examine donc les caractéristiques épidémiologiques des hépatites virales dans les pays où les opérations ont lieu et dans les pays d'origine des troupes.

On prend en compte aussi les systèmes de vaccination prévus pour le personnel militaire. Pour l'instant seuls les vaccins contre les hépatites A et B sont disponibles. On est en train d'étudier des vaccins contre les hépatites C et E ; dans l'immédiat la prévention de ces hépatites est assurée par des mesures hygiéniques.

Détails biographiques

Le présentateur **Lt-col(R) Gaetano Di Vincenzo** est officier de la Réserve de l'Armée Italienne depuis 1974. Il a passé son doctorat en Médecine et Chirurgie en 1969. Spécialiste en Pédiatrie et Médecine du Sport, il est médecin généraliste du Service Sanitaire National.

Stress in peace keeping military operations, the Belgian experience

A. E. VAN ACKER

As recent events in Iraq have been showing us again stress in peace keeping military operations can cause many more problems than expected, mainly in the area of depression and psychosomatisation. The Belgian Army, since 1960, has a longstanding experience in this kind of operations, the specific stress this can give, with the ensuing problems and the measures and approaches which were tried out. A survey of the actual results is commented and a study of possible additional measures to be taken at selection, during training, during operations and as follow-up is added.

Détails biographiques:

Lt Col Med. Né à Gent, Belgique, en 1950; Humanités classiques, études de médecine à la RUG (Gent). Neuropsychiatre, travaillant en pratique privée, avec une équipe, faisant aussi des expertises judiciaires et privées.

A travaillé notamment en Angleterre (St Georges, London Univ.), Allemagne (Köln Uni-Kliniken), Australie (Melbourne Uni), Afrique du Sud (Bloemfontein), ...

Préparation – aujourd’hui – aux activités médico-militaires de demain ou Nouvelles coopération-association de l’Armée et de l’Université

J.-M. PAUCHARD

En France, la professionnalisation de l’Armée en 1996 a entraîné la suspension de la conscription. La grande majorité des médecins, dentistes, pharmaciens et vétérinaires – parmi d’autres – était constituée de praticiens du Contingent.

Malgré la réduction en nombre des militaires, un personnel important de réservistes médicaux est indispensable pour soutenir les Forces armées dans leurs différentes actions.

Comment recruter ce personnel et comment le former? Afin de résoudre ces problèmes, des réflexions entreprises par le Service de santé et les Universités ont abouti à la mise en place dans certaines facultés – peu nombreuses actuellement – d’un enseignement optionnel complémentaire.

Ce certificat modulaire intitulé – au plan national – «Initiation au cadre spécifique d’exercice professionnel du service de santé des Armées» est obligatoire pour les étudiants qui désirent intégrer la réserve opérationnelle.

Chargé de ce cours à l’Université de Paris, l’auteur en expose le programme et en précise les modalités d’obtention.

Notice biographique

Docteur **Jean-Michel PAUCHARD** – Chirurgien dentiste en chef (c.r) (FR)

Situation militaire: titulaire d’un engagement spécial dans la réserve (ESR) à la Direction centrale du Service de Santé des Armées (DCSSA)

Situation civile: Chirurgien dentiste spécialisé en chirurgie buccale

Né en 1940 ; Marié – 4 enfants, Diplômé de la Faculté de Médecine et de la Faculté de Chirurgie dentaire de Paris, titulaire du CES de réhabilitation maxillo-faciale et du DU de médecine de catastrophe, Ancien Aide de clinique chirurgicale, le Docteur PAUCHARD est membre titulaire de l’Académie nationale de chirurgie dentaire. Il est l’auteur de plus de 70 communications sur la médecine militaire, la médecine de catastrophe et la formation des professions médicales.

Président d’honneur de la Fédération nationale des chirurgiens dentistes de réserve, ancien vice-président du GORSSA, administrateur national de l’UNOR, délégué à la CIOMR depuis 1983, J.M. PAUCHARD fût président international de la CIOMR: 1990 par intérim, 1991 et 1992. Dans le cadre CIOR-CIOMR, il fût l’auteur de communications sur le SIDA, la médecine de catastrophe et l’organisation des réserves en France.

Il est Chevalier de la Légion d’honneur, de l’Ordre national du Mérite et titulaire de plusieurs décorations françaises et étrangères dont la Médaille d’honneur du Service de santé des Armées.

Aviation Medicine (Air Transportable Isolater)

Hilary HORTON

The Air Transportable Isolator (A.T.I.) is an air conditioned “bubble bed on wheels used for evacuating highly infectious patients by air. It is part of the aeromedical evacuation equipment used by the Tactical Medical Wing of the Royal Air Force based at R.A.F. Lyneham, Wiltshire. During my call up last year to 4626 AE (County of Wiltshire) Squadron, following training on the A.T.I. (and the hazards of moving highly infectious patient at all!!!) I was fortunate enough to be a member of the A.T.I. team that travelled to Sierra Leone to bring home a soldier with a potential diagnosis of Lassa Fever.

During an oral presentation with the use of slides, I would like to propose a narrative on the brief history of the A.T.I., the personnel and the skill mix required in the team, the position of the A.T.I. today, logistics and impracticalities of its use, and how many times used in anger. I would provide a descriptive narrative of my own experiences with the team and explain some of the difficulties we encountered and the lessons learnt. My conclusion will include the taking of questions...

Brief Biographical Details of Author

Flt. Lt. **Hilary Horton** was commissioned into 4626 (County of Wiltshire) AE Squadron in March 1997, where she holds the rank of Flight Nursing Officer. Since joining the Royal Auxiliary Air Force Flt Lt. Horton has been involved in various international exercises including Global Patriot (USA) and Saif Sarea (Oman). In January 2003 she was called up for regular service, initially working at RAF Lyneham in command of the MRT team, and flying various aeromedical tasks, she was eventually deployed to Iraq in May where she worked with the Army at 1 CSMR Dressing Station in Allah Marah.

In her civilian life, Qualifying in 1977, she has worked an almost thirty year career in the NHS. and H.M. Prison service, specialising in ITU, renal, medical and prison nursing, where she developed her current interest in Occupational Health. She has held various positions in Clinical, Managerial, and lecturing posts. Flt. Lt Horton is currently working for an International Transportation Company and is studying for her B.Med Science in Occupational Health. She is divorced with three sons. Her Hobbies include horses, dogs. Swimming scuba diving and reading biographies.

The Bulgarian Model of Integrating Military and Civil Health Care System
K. KANEV MD¹, S. TONEV², D. LEKOV³
Military Medical Academy (MMA), ¹ Dept. Intensive Care; ² President of the MMA;
³ NAMROB, BULGARIA

The aim of this study is to investigate the impact of the Health Care System Reform with emphasis on the possibilities of Military Health Care to diminish the negative effect on patients. Military Medical Academy had to resolve military medical tasks, as well as to open its doors to the civilian population. With its five hospital facilities for active treatment in Sofia, Plovdiv, Varna, Pleven, Sliven, as well as the hospital facilities for long-term treatment and rehabilitation in Bankya, Hissar and Pomorie, the Military Medical Academy provides highly qualified and specialized diagnostics, treatment, rehabilitation and prophylaxis of military and civilian patients in the entire country. Military Medical Academy is priority entitled to provide emergency and immediate health care in the fields of the emergency medicine, toxicology and infectious diseases.

As recognition for good management, the Military Medical Academy was given five more medical facilities: two hospital facilities for long-term treatment and rehabilitation in Narechen and Velingrad, and three diagnostics and consultation centers in Haskovo, Stara Zagora and Burgass. In conclusion we can state that the Health Care System Reform set new requirements to Military Medical Academy which are met with honor by military medical professionals reducing the social and professional price of the reform.

Authors name(s): KANEV, Kamen¹; TONEV, Stoyan²; LEKOV, Dimitar³

Academic title: ^{1&2} Assoc. Prof., MD, PhD; ³ Prof., MD, PhD

Nationality: Bulgarians

Rank: ¹ LtCol. (Ret.); ² Brig. Gen.; ³ Col. (Ret.)

Military Occupation: ¹ Dep. ICU, Dep. Of NAMROB; ² President of Military Medical Academy; ³ President of National Association of Medical Retired Officers (NAMROB)

Spirituality and the Care of the Traumatized

R. D. PARLOTZ

Retired Chair, Department of Behavioral Science, and Professor of Psychology
Chaplain, Colonel, USAFR; Headquarters Chaplain, Headquarters Fourth Air Force;
March Air Reserve Base, California

Presentation will focus on needs and techniques in the acute care of traumatized individuals, the long term rebuilding of the individual's world view following traumatic experience, and the effects of secondary acute traumatic stress on the care giver. It includes (a) a differentiation among educational/critical incident debriefing models and therapeutic-based models of acute intervention, (b) recent research on anxiety of reservists and their dependents, deployments, and retention, and (c) civilian combat stress casualties and spiritual adaptation. This is an application to high operational tempo and personnel tempo environments.

Brief Biographical Details of Author

Education/Clinical: M.Div. & D.Min., Texas Christian University; Ed.D., Seattle University; Th.D., Laud Hall Seminary. Seven years of clinical training, including two internships & supervisory residency, Clinical Pastoral Education, Parkland Memorial Hospital, Dallas, TX.

Experience: Over 30 years of experience in direct trauma care intervention and research. Professor of psychology and college department chair for 20 years. Seminary president and professor of theology. Member, CIOR CIMIC Commission (a.k.a, Com V), 1989-1995.

Currently: Bishop of the Diocese of the Northwest, United Anglican Church. Principal: Institute for the Study of Spirituality and Trauma. Senior Associate, International Center for Religion and Diplomacy. Subject area specialist for Department of Defense.

Focused Logistics – Operation Iraqi Freedom

Susan KONCZAL

The United States Air Force Medical Service (AFMS) Expeditionary Medical Support (EMEDS) is a light, lean and rapidly deployable capability. Based upon “right-sized” modules, EMEDS tailors the needed medical care to each operating location within a theatre of operations. Using a building block concept, EMEDS deploys only what is necessary, thereby reducing the medical footprint. Initial EMEDS packages are small, therefore reliance is on reach back logistics to provide the needed supplies and pharmaceuticals quickly and systematically to the deployed locations. This presentation will highlight the observations and lessons learned regarding the logistical issues and challenges of shipping and receiving medical supplies and pharmaceuticals to EMEDS employed locations during Operations Enduring Freedom and Iraqi Freedom. Specifically addressed will be the reliance on airlift, foreign country customs issues and shipping of temperature controlled items.

Brief Biographical Details of Author

Col **Susan Konczal** is the Chief, Medical Readiness Management Division, Headquarters Air Force Reserve Command. She has served in the United States Air Force Reserve as a traditional reservist for over twenty years. Her deployment experiences include the first Gulf war, Somali, Haiti, Germany in support of Bosnia and East Timor. She specializes in medical readiness plans, manpower and logistics. Col Konczal is a graduate of the Air Force War College and holds Masters degrees in Economics and Business Administration.

Treating Former Child Combatants: Best Practices in Rehabilitation

T. F. DITZLER, M. HUBNER

Around the world, nearly 300,000 children under the age of 18 participate in armed conflict, most inducted against their will. The horrors attendant to the recruitment, training and deployment of these children bankrupts every moral, ethical and philosophical principle of civilized society. Repeated exposure to and participation in acts of violence serves to "dehumanize" these children and has a devastating impact on normal development. Deprived of basic education and marketable job skills, adolescent combatants usually mature into social casualties, emotionally and intellectually unable to contribute to their own sustenance or the welfare of their nation. The authors will give an overview of the problem, comment on specific developmental problems and cite some therapeutic principles that have demonstrated their utility in the treatment / rehabilitation of former child combatants.

Biographical Sketch

Thomas F. Ditzler, Ph.D. MA, FRIPH

Thomas Ditzler is a civilian psychologist who has served in the US Department of Defense since 1982. He is currently Director of Research for the Department of Psychiatry at Tripler Army Medical Center and a member of the Adjunct Faculty of the Center of Excellence in Disaster Management and Humanitarian Assistance. He holds appointments in psychiatry in the medical schools of the University of Hawaii and the Uniformed Services University of the Health Sciences, Bethesda. From 2000 to 2003 Dr. Ditzler was an invited lecturer at the Weatherhead Center for International Affairs at Harvard and is a member of the International Advisory Council for the Toda Institute for Global Peace and Policy Research

Dr. Ditzler has conducted behavioral health research and fieldwork in 45 countries around the world. He has conducted humanitarian assistance, disaster relief, peace operations and antiterrorism training for civilian and military personnel from over 80 countries and has published numerous articles on disaster response and behavioral medicine in austere, depleted, contingency and post-conflict environments.

Dr. Ditzler earned a BA in Psychology from Hillsdale College, teaching credentials in Social Sciences and an MA in Education from the University of Michigan and a Ph.D. in Psychology from Clayton University. He has completed postdoctoral studies at Oxford University and the University of London.

He has completed advanced training at the John F. Kennedy Special Warfare Center, US Air Force Special Operations School, the Federal Bureau of Investigation and the Central Intelligence Agency. He is a graduate of the Senior Executive Seminar at the George C. Marshall European Center for Security Studies and United Nations Staff College.

Dr Ditzler is a Member of the Association of Military Surgeons of the United States, a Fellow of the Royal Society of Medicine and the Royal Institute of Public Health in the United Kingdom and is a Companion of the Naval Order of the United States.

Mark E. Hubner, MD, Lt Col, US Air Force, MC, FS

Lt Col Mark Hubner began his military career as a family physician and flight surgeon.

He was later selected as one of the initial US Air Force International Health Specialists (IHS) members assigned to the Pacific region. In that capacity Lt Col Hubner directed military humanitarian missions focusing on the Russian Far East, Mongolia and Cambodia.

Lt Col Hubner has been a faculty member of the Center of Excellence in Disaster Management and Humanitarian Assistance at Tripler Army Medical Center, Hawaii. He has been a course instructor for their CHART and HELP courses. He has lectured in many countries including Russia, Mongolia, Cambodia, Malaysia, and Singapore.

Through his international humanitarian work Lt Col Hubner developed a greater interest in the mental health issues associated with conflict and post conflict reconstruction, as well as mental health issues of developing nations. He has a particular interest in the rehabilitation of child soldiers and in the family mental health issues associated with demobilizations of militaries and para-militaries.

To further his study of mental health, Lt Col Hubner has recently returned for a second residency in psychiatry at Wright Patterson AFB, Ohio.

Lt Col Hubner obtained his medical degree from Hahnemann University in Philadelphia, Pennsylvania.. He finished his family practice residency at Carswell AFB, Texas. Lt Col Hubner is a fellow of the Asia Pacific Center for Security Studies.

CONSENSUS 2003: A Flexible Model of Medical Civil-Military Cooperation for Mass Trauma Events on Home Land Area

G.H. RUETTER

Mass trauma events often happen unexpectedly and impact local or regional infrastructure frequently. Even special weather conditions like fog or freezing rain can cause a transient island position of a disaster impact area where neither airborne nor ground depending support from outside is possible. A subsequent capacity overload of local hospitals and further medical emergency services can be mitigated by consistent cooperation of all locally available medical resources. The lack of daily cooperation must be compensated by training and implementation of alarm systems and operations control centers which serve as an interface between different organizations. Furthermore the regular capacity of medical emergency services both inside and outside the hospitals can be multiplied by interlocked teams. This was designed and tested for the first time in Germany by Medical Corps Reserves with CONSENSUS 2003.

Brief Biographical Details of Author

Civilian positions:

2001 to present: President Monitoring Force USA Inc.

1995 to 2001: Managing Director Monitoring Force Germany and Romania

1989 to 1995: Medical Director: Paul Hartmann, Serapharm and DeGAB

1978 to 1989: Scientist, lecturer and surgeon: German Cancer Research Center and University of Marburg Medical School

Military positions:

2002 to present: Colonel MC (GE) AFR,

Commander Reserve Mobile Surgical Hospital Group

1990 to 2002: Lieutenant Colonel MC (GE) AFR,

Reserve Deputy ACE Medical Advisor, Chief Reserve Mobile Surgical Hospital

1988 to 1990: Major MC (GE) AFR,

Chief Surgeon Reserve Surgical Hospital 200

1986 to 1988: Captain MC (GE) AFR,

Surgeon Reserve Army Medical Center

1974 to 1975: Military service

CENTAG (signal staff)

Degrees:

1990 Chief Surgeon Medical Emergencies

1989: Specialist in Surgery, Sports Medicine

1988: PhD, German Cancer Research Center

1882: MD, Medical License, University of Heidelberg

**Humanitarian Military Medical Mission in a Post Conflict Environment:
Lesson From Cambodia**

M. HUBNER, T. F. DITZLER

In the aftermath of a genocidal civil war, the government of Cambodia is left with major deficiencies in its health care system. This presentation recounts a military medical mission to Cambodia; the authors describe the objectives of the mission and provide a summary of lessons learned. Specific areas of concern include health care infrastructure, logistics, standards of care, social traditions & organizational issues and potential problems in civil-military collaboration. This report is offered as a heuristic device to illuminate some of the issues that can mediate the success of military medical missions in post conflict environments.

Urinary Tract Infections

G. LUDVIK

Head of the Dept. of Urology and Andrology, Military Hospital Vienna, Austria

Urinary tract infections (UTI) are a serious health problem affecting estimated 9 % of the population each year – only respiratory infections occur more often. Women are especially prone to UTIs, an estimated 40 percent of women report having had a UTI at some point in their lives. UTIs in men are not so common, but they can be very serious when they do occur, but several other populations, including elderly persons and those undergoing genitourinary instrumentation or catheterization, are also at risk .

Escherichia coli (E. coli) causes about 80% of UTIs in adults. *Staphylococcus saprophyticus* (5 to 15% of cases), *Chlamydia trachomatis*, and *Mycoplasma hominis*. Men and women infected with *chlamydia trachomatis* or *mycoplasma hominis* can transmit the bacteria to their partner during sexual intercourse, causing UTI. Most UTIs in this population are uncomplicated and are rarely associated with functional or anatomic abnormalities, which have to be excluded in case of recurrent infections.

In general, the farther the organ in the urinary tract from the place where the bacteria enter, the less likely the organ is to be infected. UTI' occur the urinary tract as uretheritis, cystitis and ureteritis -- and progress to pyelonephritis, prostatitis, epididymitis/orchitis etc.

UTIs in elder men usually stem from an obstruction--for example, a urinary stone or enlarged prostate. In younger men weak immunity status caused by physical stress (excessive sports and training) seem to support the growth of pathogenic germs in the urinary tract. However UTI' s in men need more extended diagnosis (bacterial culture, sonography etc.) than single uncomplicated infections in women.

UTIs should always be treated by antibiotics to avoid ascension or chronification of the infection. Simple infections in women can be treated in a three day short therapy, infections in men need at least a 7 day therapy, because of the more complex anatomical structures corresponding to the urinary system. Persisting or recurrent infections need identification of the pathogenic germs by urine culture.

Brief Biographical Details of Author

Prim. LtCol **Georg Ludvik**, MD

Born June 11 1964 in Vienna

Medical School of the University of Vienna

1991 – 2000 Training in the Department of Urology, University of Vienna

1999 Degree` Facharzt für Urologie` (specialist for urology)

Since 2003 Head of the Department of Urology and Andrology of the Military Hospital of Vienna

AUSTRIAN UROLOGICAL PREVENTION PROGRAMME FOR THE AGEING MALE – AndroCHECK™

M. EISENMENGER

The world is becoming grey.

In the year 2020 690 Million peoples will be older than 65 years.

Prostate cancer (PCa.) is the prevalent cancer in men in the industrial world.

The main goal of AndroCHECK is the early diagnosis of PCa.

Other issues are

Diagnosis and therapy of

Voiding problems due to the benign hyperplasia of the prostate gland (benign prostatic

obstruction)

Hormonal changes in ageing men

Erectile dysfunction

Austrian men can ask for the prevention programme in every urological office, member of the Austrian Association of Urologists.

The keyword for the programme is **“Clever men have a longer life!”**

Brief Biographical Details of Author

MAJ **Michael Eisenmenger**, born 1960, passed the military education (1 year voluntary) after high school. He served as 1st Lt (R) and CO of a heavy infantry platoon.

After finishing the education in Medicine in Vienna he changed to the Medical Services. From 1988 to 1996 training in Urology in the Department of Urology, University of Vienna, specialist in Urology/Andrology since July 1996 with his own office since November 1997.

He is Senior Surgeon and XO of the field hospital (mobile) of “Lower Austria”.

Since 2002 he is president of the Austrian Association of Urologists.

Since 2003 he is Head of delegation, Austrian Officers Association to CIOMR.

He is member of the Society of Medical Doctors of Vienna, the Austrian, German and European Association of Urology and the Austrian and German Association of Military Medicine and the Association of Military Surgeons of the United States.

SEXUALLY TRANSMITTED DISEASES (STDs)

G. MOOSEDER, J. SCHNEDL

Head resp. Assistant Physician

Department of Dermatology, Austrian Army Hospital of VIENNA, Austria

Sexually transmitted diseases are a group of infectious diseases which are usually or predominantly acquired by sexual intercourse. "Classical" STDs or venerea like syphilis or gonorrhea are known for centuries. For the last decades, perilous viral germs, especially hepatitis B and C, and HIV, which are frequently transmitted by sexual intercourse, are upcoming.

Not only, but especially the development of effective antibiotics since World War II lead to a steady decline in the number of reported cases of venerea in Western Europe and North America. Even that could not prevent a dramatic increase around 1970, mostly caused by higher sexual activity, changes in birth control methods and high population mobility. Since then, numbers were declining again, especially enforced by the use of condoms since the rise of the acquired immunodeficiency syndrom (AIDS), which had a great impact on decreasing the incidence of all STDs in the western world.

For the last years, the incidence of venerea in the west is rising again, whilst awareness of risks is running low. Resistance to antibiotics is spreading out; therefore antibiotic regimes have to be adapted every few years, especially in case of *N. gonorrhoeae*. Mixed bacterial infections are common and present a problem in diagnostics and therapy. For example, persisting urethritis after a correct treatment of gonorrhea is oftenly caused by chlamydial infections. Moreover, genital ulceration caused e.g. by syphilis provides an easier entry into the systemic circulation for HIV or HBV.

Soldiers naturally form a risk group for STDs as their overwhelming majority are young adults, therefore sexually active, frequently engaged throughout the world, for the most part separated from their mates.

Brief Biographical Details of Authors

Prim. Dr. **Gerhard MOOSEDER**, MD, Col., born 01.01.59

Military training/education

National service with basic military training, Military high school at military academy – Wr. Neustadt, Service as NCO/Trainer/up to squadron commander

Start of my study at Vienna medical university, Parallel regular training at military hospital – Vienna,

Graduation as medical doctor

Practical training as MD – military hospital – Vienna, Practical training as specialist for emergency and life saving at the department of emergency medicine – University of Vienna

Begin of the specialising as dermatologist and venerologist at military hospital – Vienna (Prim. Kurt Steyrer; MD, Col.) and University hospital – Vienna at I. Department of Dermatology (Univ. Prof. K. Wolff)

Graduation as specialist for Dermatology and venereal diseases

Transfer to military hospital – Vienna, dermatological department as deputy chief

Foreign mission: ISAF – as well as emergency doctor (MEDEVAC) and dermatologist at the German field hospital- Kabul

Basic training for academic officers – National Defence Academy

Promotion to the chief of the Department of Dermatology and Venereal diseases – military hospital - Vienna

Cpl **Jakob SCHNEDL**, M.D., 1972 born in Vienna, Austria, on September 13th

1982 – 1990 High school, Schottengymnasium, Vienna, June 1990: High school degree

1990 – 2000 Studies of Medicine at the Vienna University Medical School, November 2000: Graduation to Medical Doctor

January 2001 within the Austrian Army

July 2001 Start of Education for a Specialist in Dermatology and Venerology, and General practioner, including six months at the emergency room of the General Hospital of Vienna

THE EPIDEMIOLOGY AND THE CONSEQUENCES OF THE AIDS EPIDEMIC

L. R. BRAATHEN

The AIDS epidemic has, since its start in the early 1980ies become a serious threat to many nations, above all in Africa.

Today the estimate for the number of HIV infected in the world are 40 - 50 million.

Swaziland for example, with its one million inhabitants, has a HIV prevalence of 40% and 50.000 orphans, with only 2.000 of them getting treatment.

In third world countries only 400.000 of 6 million with advanced disease receive proper therapy.

The newer treatments for AIDS are so expensive that third world countries cannot afford it.

The WHO project "3 by 5", meaning supply of 3 million people with antiretroviral drugs by 2005 is a failure. There is funding only for 1 million.

This catastrophic situation have serious deteriorating effects on the socio-economic situation in many third world countries.

Brief Biographical Details of Author

Lt. Col. Prof. **Lasse R. Braathen** studied medicine in Germany and Norway and graduated in 1969. He obtained the PhD in 1980 and the Master of Health Administration in 1988.

He is a specialist in Dermatology and Venerology, in Angiology and in Allergology and Clinical Immunology.

From 1979 to 1989 he was vice-chairman of the Dermatology Department at the National Hospital in Oslo, Norway, and from 1989 Professor and Chairman of the Dermatological University Clinic, Inselspital, Bern, Switzerland.

Lt. Col. started his military career in 1962 in the Norwegian army.

Lt. Col. Braathen has over 200 scientific publications in peer-reviewed professional journals, has served as president, chairman and member of various advisory boards of many international and national organizations. Lt. Col. Braathen took the initiative to establish the Scientific Committee of CIOMR and served as its President for 11 years, he then served as secretary general, than as president elect and as international president CIOMR from 1998-2000.

Lt. Col Braathen is honorary member of the Austrian and several other European Dermatological Societies, honorary member of the Association of Military Surgeon of the United States. He has the shield of honor of the Norwegic Reserve Officer Association and the French médaille des services militaires volontaires of the French Department of Defence.

BULLET AND SHELL-SPLINTER INJURIES: NEW WAYS OF VISUALIZATION
M. J. STRICKNER, R. KDOLSKY

Medical University of Vienna & Vienna General Hospital, Department of Traumatology
Field Hospital (mobile) “Lower Austria”

By means of clinical examples we try to compare traditional radiographic solutions (standard radiographs and fluoroscopy) and modern four – detector row or multislice Computed Tomography in bullet and shell-splinter injuries. Nowadays there already exist CT scanners – mainly situated in standard containers for military use in the fields. The advantages over traditional radiographic or CT equipment are shorter examination time together with easier i.v. application of contrast media providing full information to the attending field trauma surgeon. Especially when parenchymatous organs and central or peripheral vessels are involved together with damage to soft tissue, bones and joints a CT angiography and a 3D-reconstruction or 3D – surface rendering (Shaded Surface Display) can be helpful for the planning of the necessary surgical procedure.

Brief Biographical Details of Authors

Col (R) Dr. **Manfred J. STRICKNER** and Cpt (R) Dr. **Richard KDOLSKY** are reserve - officers of the Austrian Armed Forces, Medical Corps (CO & Sen. Surgeon / Mobile Field Hospital “Lower Austria”). Both graduated from the Viennese Medical University, working there as Consultants at the Department of Traumatology. Col STRICKNER represents the Austrian Society of Military Medicine and Pharmacy as the acting president.

FRACTURES OF THE MANDIBULAR COLLUM – SURGICAL TREATMENT

Gabriela EISENMENGER

The condylar region is one of the most frequent sites for mandibular fractures, with direct application of miniplates being the most commonly used open-fixation today. Yet, anatomic and biomechanical limitations continue to make this application technically challenging with a considerable complication rate. To analyse such incongruencies with respect to the complex biomechanical behaviour of the mandible in living subject, a particular mathematical method – namely finite-element analysis – has been used. Individual human mandible geometry, the specific bone density distribution, and the position and orientation of the masticatory muscles were evaluated by performing computed tomography scans and a sequential dissection of the cadaver mandible. Three-dimensional finite-element analysis was performed for different fracture sites, osteosynthesis plates, and loading conditions. Osteosynthesis of fractures of the condular neck with 1 or 2 miniplates was found to be an insufficient fixation method. This also applies for plates according to Pape et al., when used in singular fashion (high condular neck fractures excepted). So until now the use of 2 plates in the manner of Pape et al. has to be recommended. The results of the finite-element study led to the development of a singular osteosynthesis plate made of titanium in a diametrical dimension of 5.0 x 1.75 mm. The actual stiffness of such a fixation plate is approximately 3 times higher than the stiffness of devices commonly in use. Until now about 30 fractures of the condylar process have been stabilized with this new plate (follow up between 4 and 18 months). No bending, loosening and fractures of the plates have been observed.

DDr. **Gabriela Eisenmenger**, born in Hainburg an der Donau, Austria.

General school and college education in Bruck an der Leitha, Austria. Graduation 1989

Medical training at Vienna Medical School, University of Vienna, Graduation 1995

Postgraduate training at the hospital of Hainburg an der Donau, Austria (1996-1997).

Study of Dental Medicine at Vienna Medical School, University of Vienna; Graduation 2000

Since 2001 training in Oral and Maxillofacial Surgery as resident at the Department of Cranio-, Maxillofacial and Oral Surgery (Chairman: Prof. DDr. R. Ewers), Medical University of Vienna.

RECONSTRUCTION OF FACIAL TRAUMA – USE OF 3D – MODELS

C. KLUG, R. EWERS

Stereolithographic models and computer navigation for planning and realizing osteotomies in cases of posttraumatic deformities of the zygomatic complex.

Stereolithographic models of the skull are used as diagnostic tools to evaluate deformities of the craniofacial skeleton in all three dimensions. They also offer the opportunity to simulate osteotomies under ideal conditions (evaluation of skeletal symmetry, measurement of skeletal distances and angles, etc.).

The treatment of established deformities of the zygomatic complex is a demanding task. Osteotomy and repositioning of the entire zygomatic complex is performed to achieve facial symmetry and for correction of a deranged ocular position (enophthalmos, vertical asymmetry) in an aesthetically critical area of the face. Surgical access is limited to avoid scars. In cases of established deformity fracture edges are vanished as a consequence of remodelling processes and do not serve as landmarks for repositioning.

In a methodical clinical study we investigated the feasibility and accuracy of a new surgical technique called point-to-point navigation. By this technique the ideal position of the zygoma – as found on the stereolithographic model – is transferred to the patient by computer navigation. Thereby the screw positions serve as key targets in order to perform osteosynthesis with individualized (in the simulation on the model) plates. For navigation both, the patient and the model, are referenced to the same CT dataset so that screw coordinates from the model can be relocated in the patient.

Objective evaluation of the postoperative result was performed by overlay of postoperative CT scans of the model and the patient and by measuring discrepancies between screw coordinates and anatomical landmarks.

Advantage of this technique are 1. the possibility to perform surgery with small, aesthetic approaches, 2. precise achievement of the planned result, 3. reduction of time of surgery. Disadvantages lie in the technically demanding and time consuming procedure of planning.

Brief Biographical Details of Author

Dr. **Clemens Klug**, born in Vienna, Austria, in 1972

General school and college education in Vienna, Graduation 1990

Medical training at Vienna Medical School, University of Vienna, Graduation 1996

Postgraduate training the hospital of Stockerau, Austria (1997-1998)

Teaching of anatomy in dissection classes at the anatomical Institute of the University of Vienna (1994-1998)

Since 1998 training in Oral and Maxillofacial Surgery as resident at the Department of Cranio-, Maxillofacial and Oral Surgery (Chairman: Prof. DDr. R. Ewers), University of Vienna.

Attendance of educational rotations to the department of Oral and Maxillofacial Surgery, University of North Carolina, Chapel Hill (2000, 2003)

Several publications in international scientific journals, several presentations at national and international meetings.

PERFORATING ABDOMINAL INJURIES

E. WENZL

Evaluation of abdominal casualties under combat conditions differs from practice in civilian life. On the one hand there are influencing factors, which are beyond the surgeon's control. On the other hand availability of diagnostic tools is limited. So the decision for operation has to rely mainly on results of basic skills like inspection, palpation, auscultation and recorded vital signs. Rectal examination, plain abdominal X-ray, ultrasound and insertion of nasogastric tubes and urinary catheters can add additional information.

As a general rule a midline incision is performed and achieving hemostasis is the primary goal. After bleeding has stopped a thorough and systematic exploration of the whole peritoneal cavity is mandatory. Injuries of the diaphragm should be repaired with interrupted sutures. Perforations of the stomach or esophagus can be repaired primarily in most instances. Preserving measures for bleeding spleen lesions should only applied, if hemostasis is reached quickly and appears safe. Otherwise splenectomy is recommended. Injuries to the liver can be very complex and complete vascular exclusion is sometimes the only chance to repair major vessels. This exclusion should not applied for a time longer than 30 minutes. In severe liver traumas a liver pack, using pads to compress the organ, can be life saving. The pack is usually removed after 24 to 72 hours. Lesions of hepatic vessels or common bile duct should be primarily repaired. Injuries to the pancreas are usually drained, only in infrequent cases resections are necessary. Injuries of the small intestine can be usually closed with interrupted absorbable sutures. Only in cases with signs of severe peritonitis an enterostomy has to be performed. In contrast colonic lesions should be treated with loop colostomy or resection and proximal diversion. Rectal lesions are difficult to treat. A proximal diverting colostomy should be done, the lesion closed and sufficiently drained. Injuries to the urinary tract sometime require nephrectomy or repairing lesions of the ureter or bladder with absorbable sutures. An adequate postoperative care is also essential. As in civilian surgery typical complications like ileus, dehiscence, hemorrhage, abscesses may occur. These instances can require one or more reoperations.

Brief Biographical Details of Author

Etienne Wenzl MD FRCS, Professor of Surgery, Date of birth: 28. November 1951

EDUCATION

1958-1962 Primary School. 1962-1970 High School, Vienna. 1970-1971 Studies of Electric engineering at University of Technics, Vienna. 1971-1978 Medical Studies at University of Vienna. 1974-1977 Tutor at the Institute of Anatomy, University Vienna.

POSTGRADUATE TRAINING:

1979 October: Start of Training in General Surgery at I. Chirurgische Universitätsklinik [1st Surgical Department] (Chairman: Prof. Dr. A. Fritsch), University of Vienna

February 1987 Registration as fully trained specialist in General Surgery

1988 -1989 Research Fellowship at the University of California, Berkeley USA, (Department of Physiology and Anatomy / Department of Cellular and Developmental Biology, Molecular Biology)

November 1991 Associate Professor of Surgery at 1st Surgical Department, University Vienna.

March 1993 Registration as fully trained specialist in Vascular Surgery.

1994-2004 Vice Director of the Department of General Surgery, University Vienna

1995 October-1996 May Substituting director of the Department of General Surgery, University Vienna

RECENT APPOINTMENT:

2004 Head of Department of General and Thoracic Surgery LKH Feldkirch, Vorarlberg Austria

ACADEMIC ACTIVITIES:

more than 100 articles in reviewed scientific journals, 12 articles in books, over 250 abstracts. Bed side teaching and lectures for medical students. Lectures for postgrad courses. Lectures for nurses.

1988 January-1989 April Research Fellowship at the University of California, Berkeley (Department of Physiology and Anatomy): Measurement of intracellular pH in gastrointestinal epithelial cells.

1998 Head of the working party "Esophagus" in the ACO (Austrian Society for Surgical Oncology).

Review activities in different Journals (Acta Chirurgica Austriaca, Wiener Klinische Wochenschrift, American Journal of Physiology).

MEMBERSHIP IN SCIENTIFIC SOCIETIES:

Austrian Society for Surgery (ÖGC), Working Party for Minimally Invasiv Surgery (AMIC) of the ÖGC, Austrian Society for Vascular Surgery, Austrian Society for Gastrointestinal Motility, Society of Medical Doctors of Vienna, Austrian Society for Gastroenterology and Hepatology, Austrian Society for Senology, International Gastro-Surgical Club, American Physiological Society, Fellow of the Royal College of Surgeons of England

PARAOSSIOUS CLAMP-CERCLAGE STABILIZATION: A BIOLOGICAL OSTEOSYNTHESIS TECHNIQUE

G. WANIVENHAUS

Summary – A biological osteosynthesis technique to repair diaphyseal fractures of long bones in dogs and cats - the paraosseous clamp-cerclage stabilization - is introduced. Fixation is obtained with clamps, shaped during surgery with Kirschner pins and attached to the bone shaft with double cerclage wires. The small implant and minimal attachment to the bone protect the osseous blood supply and the soft tissues. Elasticity of the pins allows for minimal residual movement and promotes callus formation. Development of this method on bone models showed sufficient stability and universal application in bone shaft fractures. In more than 60 dogs and cats, this technique led to almost immediate weight bearing of the extremities, distinct callus formation, and permanent fixation of the implants.

Method – A lateral surgical approach is used in both humeral and femoral fractures, while the radius is approached craniomedially, and the tibia from cranial. After open reduction of the fracture site, fixation is obtained with 2 clamps, shaped intraoperatively with Kirschner pins (1-3 mm diameter). One end of each clamp is driven at an angle through the entire width of the bone, while the opposite end is placed at an angle of 100-110° through the adjacent bone cortex only. The clamps should be placed at slightly different levels and angles and are attached to the bone shaft with double cerclage wires (0,4 – 1,25 mm).

Results – Most patients are bearing weight on the stabilized limb 1 to 7 days after surgery. In radiographic follow-ups bone shafts are showing good ossification with distinct callus formation and no loosening of the implants or developing osteomyelitis.



Conclusions – Paraosseous clamp-cerclage stabilization provides sufficient stability and universal application in shaft fractures in dogs and cats of any age and body weight. The small implant and minimal attachment to the bone protect vessel supply and soft tissues. Elasticity of the pins allows for minimal residual movement and promotes callus formation.



<http://www.tierklinik.net/pkes.htm>

Brief Biographical Details of Author

Lt Col Günther Wanivenhaus, Date of Birth: February 22, 1953

Education and Career:

1971-1984 University of Veterinary Medicine, Vienna

1984 : Graduation, University of Veterinary Medicine, Vienna

- 1984: Military Service and Officer Training at the Theresien Military Academy in Wiener Neustadt – First Lieutenant
- 1984: Veterinary Practice in Bruck / Lth, Austria
- 1987 : Opened Veterinary Clinic - Bruck / Lth, Austria
- 1995 : Doctorate in Veterinary Medicine (Dr. med. vet.)
Dissertation : “The influence of tonsillectomies on parosteitis eosinophilica in dogs”
- 1995: Bank Austria – Scientific Award for Dissertation
- 1995: Received title of Small Animal Specialist
- 1996 - 2000 : Development of a new surgery technique to stabilize fractures in dogs and cats
- 2001: Published “Paraosseous clamp-cerclage stabilization: a biological osteosynthesis technique“ in Wiener Tierärztliche Monatsschrift**
- 2002 : VÖK – Award for Publication Presentations of this publication at the Annual Meeting of the Austrian Association of Small Animal Practitioners and Osteosynthesis Workgroup
- 2002- 2003: Supervised follow-up dissertation “Evaluation of clinical applications of the paraosseous clamp-cerclage-stabilization technique in dogs and cats”
- 2004 : Received professional title of “Veterinärat“

Affiliations, Jobs, and Military Ranks:

Lieutenant Colonel Veterinary
 Staff Officer at the Military Headquarters in Lower Austria – Chief Veterinarian
 President of the Austrian Association for Military Veterinary Medicine
 Veterinarian and instructor for the Austrian Military and Police Canine Squads
 Instructor of the University of Veterinary Medicine, Vienna for Surgery and Ophthalmology
 Board Member of the Veterinary Radiology Association, Austria
 Member of the Austrian Association of Small Animal Practitioners
 Representative of the Austrian Small Animal Clinics in the Chamber of Veterinarians

FOOD HYGIENE INSPECTIONS BY THE AUSTRIAN ARMY VETERINARY SERVICE

A. POLIVKA-TREUENSEE

After a short historical review about the Military Veterinary Service in the Army of the 2nd Austrian Republic the year 1989 is remarkable, when the Minister of Defense gave the task of Food Hygiene Inspection within the Austrian Army from the Medical Service (MS) to the Veterinary Service (VS). At that time the VS was independent from the MS. Nowadays both services are within the Health Service.

1989 as first measurements inspections of all military kitchen facilities and very detailed reports about them were made.

The following consequences were

- “up to date” manuals according to regulations by civil laws (the army has no special regulations in peacetime, during exercises or international engagements or in wartime)
- the “Hygiene Case” for self controls of temperatures, function of dishwashers, testing kits for frying oils and hardness of the drinking water and a video about kitchen hygiene. (this video ensures the same information level of the kitchen personnel).
- microbiological examinations of all large army kitchens (about 120) by a civil laboratory and interpretation of the results by the VS.

Then a few slides show the basics of microbiology, parasitology, personal and working hygiene, preservation and cleaning and disinfections that the personnel should know.

Under field conditions kitchen hygiene is only in a few points (building/tent; clothing/shoes, trousers) different from the normal requirements (hygienic kitchen equipment; personal hygiene, working hygiene, cleaning and disinfections).

When there are found poor hygienic conditions, the possible measurements of the visiting veterinary are: immediately correction, giving a deadline or closing of the kitchen and a written report to all responsible commands.

Some pictures of kitchens and field kitchens are shown and mistakes of hygiene discussed.

Brief Biographical Details of Author

Veterinär Mag. **Adolf POLIVKA-TREUENSEE**

- | | |
|-----------|---|
| 1945 | born in SALZBURG |
| 1950-1966 | Elementary School in SALZBURG, High School in LINZ |
| 1966 | 1 year voluntary at the Infantry School SALZBURG/GLASENBACH
Troop pioneer/Heavy Infantry Company St. JOHANN/Tyrol |
| 1967-1976 | Contract with the Department of Defence to serve 9 years having the opportunity to study Veterinary Medicine and to stay within the army as a veterinarian afterwards for 10 years.
NCO at the Military Medical School/ VIENNA and studies at the Veterinary University Vienna |
| 1976 | Veterinary Diploma
Veterinary Officer in the staff of the Command 2 nd Corps/SALZBURG (Western territory, half of AUSTRIA) up to |
| 2002 | New Army organisation: Veterinary in the Support Command/VIENNA |
| 2003 | Veterinary in the Department of Defence/Joint Command Staff. |

GUIDELINES FOR DRINKING WATER QUALITY IN RELATION TO DIFFERENT WATER PURIFICATION SYSTEMS

D. RACKL

Infectious diseases caused by pathogenic bacteria, viruses and protozoa or by parasites are the most common and widespread health risk associated with drinking water. Waterborne infectious diseases can be extremely fatal, globally more than two million people die from diarrhoea every year. In the so called higher educated European region alone over ten thousand children under five years die of diarrhoea. The main problems are in the developing world. The impact of an episode of diarrhoea on a child in a developing country is typically greater than the impact on a child in a more developed country because of malnutrition and thereby to developmental problems.

The WHO guidelines, comprehensive national and local surveillance, the early warning systems and different water purification systems are established, improved or maintained to prevent water born diseases or similar outbreaks.

Brief Biographical Details of Author

MAJ Mag. med.vet. **Dietmar Rackl**, Veterinary Officer, born 21.12.1966 in Graz

EDUCATION

1973-1977 Primary School Mariahof,
1977-1981 High School Neumarkt
1981-1986 BORG Murau: 3.3.1986 *Final examination*

UNIVERSITY

1986-1995 Study of Veterinarian medicine in Vienna: *Graduation: 12.5.1995* .
8.11.2001 Graduation to Public health veterinarian officer
11/2001-3/2002 Course (GALG) at the Academy of defence

PROFESSIONAL HISTORY

02 10 95-30 05 96 Basic military service at KpsKdo I as Military Veterinary
01 06 96-30 11 96 Military Veterinary /ZS-kurz
01 12 96-31 03 98 Military Veterinary /MZ-Charge
01 04 98-30 11 02 Military Veterinary /MZO1
since 01 12 02 MBO1 at Kdo EU/MilGesW/ Ref IV, Chief of Ref IV/VetD

MISSIONS ABROAD

29 07 97-30 08 97 ATHUM/PL: Disaster operation in Poland (VetO/HygO)
16 10 98-30 10 98 International training CAE/98 in Slovenia (VetO/HygO/drinking water purification)
13 04 99-21 07 99 ATHUM/ALBA operation in North Albania, Austrian Field Hospital in Shkodra
Chief of the field labour, Chief of Veterinarian and Hygienic affairs
15 08 99-28 09 00 Force Hygiene Officer, Headquarter UNFICYP/Nicosia

PARA-TBC, AN ILLNESS OF HUMAN BEINGS AND CATTLE ?

Seroepidemiological study on the distribution of Johne's Disease (*Mycobacterium avium ssp. paratuberculosis*) in Bavaria

J. BÖTTCHER, A. GANGL

Johne's Disease is regarded as a disease of cattle which has an economical impact on life stock industry. Moreover a link to Morbus Crohn is discussed. This implicates the need for control strategies. To set up control strategies it is a prerequisite to get insights into the distribution of this economically important disease in a given area.

In 2003 a seroepidemiological monitoring on Johne's Disease was performed in Bavaria. Sera of 26966 animals on 1071 farms were tested for antibodies against *Mycobacterium avium ssp. paratuberculosis* (MAP). These sera distributed over every administrative district and 77 counties. Because seroconversion takes place after month or even years only animals older than 18 months were included in this study. The commercialized ELISA of highest sensitivity (Svanova, Upsala/IVD GmbH, Aninstitut der Tierärztlichen Hochschule Hannover) was used supposing that this test results in a rate of false positives.

Totally, 16% of sera were positive, 10% were questionable and 74% were negative. 792 farms from which at least 10 samples were tested, were analysed further: In 7,6% of these farms no antibodies were detected and in further 16,4% of farms maximal questionable results were obtained. Assuming that intra-herd prevalences will be higher in affected herds, these were determined as an additional information: Five per cent of the herds had prevalences of more than 40%, 22% of the herds had prevalences between 20 and 40%, and 57% between 1 and 20%. For a more detailed analysis a set of 2814 sera from 119 herds, which distributed over Bavaria, too, were tested in parallel in three ELISAs of different sensitivities and specificities (Svanova, Upsala, Fa. Pourquier, Montpellier und IDEXX, Wörrstadt). Using the IDEXX- and Pourquier-test 1,4% and 0,9% of the sera tested positive, respectively, whereas 24% of the sera tested positive in Svanova/IVD-test. The herds were classified according table 1 in classes A to E. Because of the known specificities of the tests the probability for MAP-infection in a given herd decreases from A to E. E.g. only 6 herds (5%) were classified as class A, because of agreement of individual test results. Herd prevalences in 5 of 6 class A-herds exceeded 30% in Svanova/IVD-test. On the other side only 4 of 60 herds of class D had herd prevalences of more than 30%.

Table 1: Scheme for classification of herds in classes A to E based on results in different tests for individual animals. Agreement of at least one sample per herd according to the shown test interpretations results in the respective class. Results for 119 herds tested in three tests are given. On the basis of the results in 119 herds (class and herd prevalence) the rates for classes A to E for 792 herds with known herd prevalences were calculated.

test/class	A	B	C	D	E	Σ
Svanova/IVD	+)¹	+	+	+	?/-	
IDEXX	+/?		?	-	-	
Pourquier	+/?	+/?	-	-	-	
Herden n=119	6 (5,0%)	18 (15,1%)	27 (22,7%)	60 (50,4%)	8 (6,8%)	119 (100%)
Bavaria)² n=792	3%	12%	16%	52%	16%	792 (100%)

)¹ test interpretation, which was regarded as positive

)² Estimation for Bavaria based herd prevalences of 792 herds and on observed herdprevalences for classes A to E in 119 herds.

On the basis of the present study, the following rates for classes A to E were estimated: A 3%, B 12%, C 16%, D 52% and E 16%.

Brief Biographical Details of Author

Jens Böttcher

Study of Veterinary Medicine at the Veterinary School in Hannover (1983-1988), Thesis in Virology (1988-1991) - "Crossneutralizing antibodies against Alphaviruses"; Dr. Bommeli AG, Berne - Development, production and quality control of diagnostic tests (1991-1998). Hoechst-RousselVet/Intervet, Unterschleißheim -

Head of the department for veterinary diagnostics (1998-2003). Bavarian Animal Health Service,
Head of the central laboratory (since 2003).

ELECTRONIC PATIENT RECORD: FUTURE ASPECTS OF MEDICAL COMMUNICATION

P. POKIESER, J. BRANDSTÄTTER

Every endeavour has been made to enforce the development of electronic patient record (EPR) for improvement of the transfer and organisation of medical data. The most efforts in this topic have been achieved by groups, who invent for the organisation and administration of medical work. Lesser input has been given to the development of computer applications, which support specific needs of doctors, nurses and other involved persons.

The purpose of this presentation is to identify some deficits of recent EPR development and to give an overview of possible solutions, which could be integrated in EPR applications to improve medical work. From the user's view, several points of need for advanced EPR – function will be discussed.

- The design of the EPR: Cockpit design versus Desktop design
- Organisation of data along the patients time line
- Quick access to specific data by filter systems for symptoms (problems), diagnoses, body regions
- Web based tools for online interdisciplinary collaboration
- Knowledge base for specific information for groups and individuals
- E – Learning modules for staff development
- online engineering for mobile hardware

Our research group of the medical university of Vienna is interested in the development of extended functionality of computer assisted medical communication. Our EPR model is used in a real world setting and the results of our trials will be presented:

- Extended EPR function for multi media interdisciplinary case conferences
- Organisation of staff supported by content management functionality
- Case based multi media knowledge base for staff information

Brief Biographical Details of Author

Peter Pokieser

* 1960, Associate Professor of Radiology, Medical University of Vienna

Project director: Unified Patient Project – EPR, medical design

Member of staff: Department of Radiology

Married, three children, special interest: medical information technology,
Medical communication, gastrointestinal radiology

Jürgen Brandstätter

* 1970, IT- Professional, Medical University of Vienna

Project director: Unified Patient Project- EPR, technical design

Married, three children, special interest: medical information technology,
Development of web based applications

TELE-MEDICINE IN M.A.S.H.

L. KRONBERGER

Telemedicine means medicine at a distance and combines the use of telecommunications, computer technologies, and informatics – the applied science of collecting, storing, and retrieving data to support informed decision making – to improve the effectiveness and efficiency of healthcare. Telemedicine is most frequently used to describe care-related applications while Telehealth encompasses other functions such as education and training, health promotion, public health, health services management, technical information retrieval, etc. Cybermedicine refers to the intersection of health and bioengineering, implantable intelligent hardware, automation of processes, robotics, biosensor nanotechnology, etc. Telemedicine potentialities are most often misunderstood and confused by focus on implementation issues, regulatory problems, limited applications and utopian expectations. The Internet offers the potential to allow convenient access to authoritative information at the point-of-care. Telemedicine includes Teleconsultation, Teleradiology, Telelab, as well as Telesurgery in the Future. Although the Austrian Army has only few experiences in Telemedicine (Bosnia and Kosova), the Military Medical School of the Austrian Federal Army and the Command for International Deployments of the respective Army have a strong interest in using information technology to help provide specialty expertise to primary care providers to enhance diagnosis and treatment of complicated medical problems in order to help maintain deployment's readiness. The combination of several wireless communication techniques enables a variety of telemedicine applications. There are two possible scenarios: the first scenario describes enabling remote examination, advising the patient and controlling the medical equipment the patient or the Mobile Army Hospital uses. Secondly a scenario envisioning high quality video communication between doctors at different locations with an high speed data channel for transferring medical data is introduced.

The latest developments in microsystems and nanotechnologies as well as information processing and communication technologies allow miniaturization and non-invasive smart monitoring of physiological and physical data- Ongoing cutting-edge multidisciplinary research in textile fibers, biomedical sensors, and wireless and mobile telecommunications integrated with telemedicine, aims at developing intelligent biomedical clothing (IBC) that could pave the way to support personalized management of health and diseases at the point of need and at any time.

In the Future even after continuous access to the Internet would be provided to all Medical Field Units, there may never be enough bandwidth available to the primary care providers. Their medical information needs are always secondary to the military optional information needs and in times of conflict, such bandwidth may be turned off to reduce the electronic emissions signature. This simple fact leads to a requirement for continuous refinement and enhancement of the caching strategy under the assumption that patrons can only expected to have intermittent access to the Internet.

Nevertheless personal care and communication is important in the future as it was in the past and the present. From "Future - The Aventis magazine" it should be cited *In years gone by, I was often asked, "Will the computer replace the doctor?" My rejoinder, still apt today, is that any doctor who can be replaced by a computer deserves to be.*

Brief Biographical Details of Author

Leo Kronberger, born March 24, 1957 in Graz, Doctor medicinae universae

Present position: Assistant Professor

Education: Karl Franzens Universität Graz (Charles-Francis-University, Graz), Graduation: May 26, 1982

Authorization to practice Medicine: September 30, 1985

Authorization to practice General Surgery: July 1, 1991

July 1991 up to now: Gen. Surgery, Clinic of Surgery Graz Senior Fellow, Assistant Professor of Surgery

Gastro-enterological Endoscopy	January 1991 up to now
Emergency Endoscopy	Fall 1994 up to now
Senology	January 1991 up to now
Surgical Research	January 1994 up to now
Hyperthermia	January 1998

Military Service October 1987 – March 1988

Graduation: April 1, 1993, Lieutenant Superior Field Surgeon, Mobile Army Field Hospital up to 2022

Education

McMaster University, Hamilton, Ontario	June - August 1981, elective
Clinic of Internal Medicine Erlangen, Germany	Gastroenterological Endoscopy and Ultrasound, September 1989
European School of Oncology	Breast Cancer, Orta, Italy, June 1989
European School of Oncology	Colo-Rectal Cancer, Orta, Italy, October 1990
St. Mark's Hospital London	Winter Term January - March 1994
University of Applied Sciences Joanneum	
MSc Curriculum Telemedicine 2003/2004, Graduation expected Winter 2004	

