TropNetEurop

9th Workshop on

Imported Infectious Diseases

2008

October, 3th-4th, Madrid

European Network on Imported Infectious Disease Surveillance
www.tropnet .net

PROGRAMME

9th TropNetEurop Workshop 03-04/10/2008

Date & Time		Speakers
Friday, 03/10/2008		
09^{00}-09^{30}	Introduction	Ignacio Arribas, Fundación para la investigación del HUPA & Juan Cuadros, Hospital Príncipe de Asturias, Madrid
09^{30}-11^{00}	Report of steering committee and co-ordinator • Membership issues • Reporting • Data management • ECDC, WHO, & others	Ron Behrens, London Zeno Bisoffi, Verona Anders Björkmann, Stockholm Joaquim Gascon, Barcelona Tomas Jelinek, Berlin
11^{00}-11^{30}	**Break**	
11^{30}-12^{45}	Report of steering committee and co-ordinator (continued) Election of Steering Committee and Network Coordinator	
12^{45}-13^{45}	**Lunch**	
13^{45}-15^{15}	The Unit Preparedness & Response, ECDC: Presentation and Discussion	Pedro Arias, Stockholm
15^{15}-15^{45}	Tropical Medicine in Madrid	Juan Cuadros, Madrid
15^{45}-16^{15}	**Break**	
16^{15}-16^{45}	Tropical Medicine in Madrid: research from Ramon y Cajal	Rogelio López-Vélez, Madrid
16^{45}-17^{15}	Clinical problems associated to *P. ovale*	Gerardo Rojo, Madrid
17^{15}-17^{45}	Severe *P.vivax* and drug resistance genes	Hernando del Portillo, Barcelona
17^{45}-18^{15}	Clinical and epidemiological research in Chagas in migrants	Joaquim Gascon, Barcelona
18^{15}-18^{45}	Chagas disease in Spain	Maria Flores, Madrid
20^{30}	**Dinner**	
Saturday, 04/10/2008		
9^{00}-9^{15}	Introduction	Tomas Jelinek, Berlin
9^{15}-9^{45}	Case report: fatal dengue fever in Norway	Bjørn Waagsbø & Svein Gunnar Gundersen, Kristiansand
9^{45}-10^{15}	Malaria from West Africa	Ron Behrens, London
10^{15}-10^{45}	M/XDR-TB-Situation in South Africa	Martin Grobusch, Johannesburg
10^{45}-11^{15}	**Break**	
11^{15}-12^{00}	Treatment of complicated malaria with Artesunate	Thomas Zoller, Berlin & Alberto Matteelli, Brescia
12^{00}-12^{30}	Severe falciparum malaria treated with artesunate in Norway	Kristine Mørch, Bergen
12^{30}-13^{00}	Malaria Rapid Diagnostic Tests - Where do we go from here?	Peter Chiodini, London
13^{00}-13^{30}	MALTHER: final results	Martin Grobusch, Johannesburg
13^{30}-14^{30}	**Lunch & Farewell**	

WORKSHOP ORGANIZER AND LOCAL CONTACT ADDRESS

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MEETING VENUE

The meeting will take place at the Hospital Príncipe de Asturias ,Alcalá de Henares-Madrid on Friday 3rd—4th September 2008.

WELCOME

Dear colleagues,

It is a pleasure to host the 9th Workshop of TropNetEurop in the Comunidad de Madrid, one of most thriving regions in Europe. Our proximity to Africa and our historical, cultural and economic ties to Latin America have created a young and multiethnic society in constant change.

In the last 20 years, the demand for health care of migrants and travellers has increased incessantly in our community. New clinical units and scientific groups made a start up and joined to other national and international groups of experts in Tropical Medicine and this meeting is an excellent opportunity to exchange information and experience.

We are also glad to receive a group of European experts in our hospital, located in the World Heritage City of Alcalá de Henares, where one of the oldest Universities in Europe enlightened the coexistence of different cultures.

We are very grateful to the Foundation for Research of Hospital Príncipe de Asturias and the University of Alcala de Henares for sponsoring the event.

We hope you enjoy a fruitful and interesting meeting

Juan Cuadros
Alcalá de Henares, Madrid, Sept., 30th , 2008

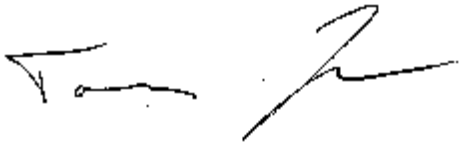
Dear colleagues!

TropNetEurop has now finished its 9th successful year. The network has become an widely accepted provider of reliable surveillance information on European and international level. Topics of the upcoming meeting reflect this, ranging from a presentation from the ECDC to discussion of a current EU proposal that has been submitted by the steering committee in the name of TropNetEurop.

The network and its members unite 51 specialized centres all over Europe. Within the network, we see an average of 48.000 patients post travel per year. TropNetEurop remains by far the largest network on imported infectious disease surveillance globally. We have managed to develop TropNetEurop into a renown reference in the field of imported infectious diseases. The large output of widely distributed material shows the value of our work. This continuous success is achieved through considerable effort from all members who put in extra time and work to make the network possible.

I am looking forward to an exciting meeting in Madrid. On behalf of all members of the network, I wish to express our special thanks to the local organising team of this workshop, especially to Juan Cuadros, who made the meeting possible.

Berlin, Sept, 29th, 2008



Tomas Jelinek

ACKNOWLEDGEMENTS

Financial support for the workshop from following sources is gratefully acknowledged:

- This meeting was kindly sponsored by the Fundación para la Investigación del Hospital Príncipe de Asturias and the Universidad de Alcalá de Henares

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7th TropNetEurop Workshop

Lisbon, September 22nd-23rd Sepetmber, 2007

Workshop Minutes

The workshop was attended by 43 participants from 16 countries.

No	Surname	First Name	Town	Country
1.	Amiamo	Victor	Madrid	Spain
2.	Atougia	Jorge	Lisbon	Portugal
3.	Behrens	Ron	London	UK
4.	Beran	Jiři	Hradec Kralove	Czech Republic
5.	Berg	Åse	Stavanger	Norway
6.	Bisoffi	Zeno	Verona	Italy
7.	Blomberg	Bjørn	Bergen	Norway
8.	Bouchaud	Olivier	Paris	France
9.	Boyd	Richard	Dublin	Ireland
10.	Calleri	Guido	Torino	Italy
11.	Chiodini	Peter	London	UK
12.	Clerinx	Jan	Antwerp	Belgium
13.	Constantino	Claudia	Lisbon	Portugal
14.	Cuadros Gonzales	Juan Antonio	Madrid	Spain
15.	Develoux	Michel	Paris	France
16.	Fry	Graham	Dublin	Ireland
17.	Gascon	Joaquim	Barcelona	Spain
18.	Gjørup	Ida	Copenhagen	Denmark
19.	Godinho	Francisco	Lisbon	Portugal
20.	Grobusch	Martin	Johannesburg	South Africa
21.	Gundersen	Svein Gunnar	Kristansand	Norway
22.	Hatz	Christoph	Basel	Switzerland
23.	Hellgren	Urban	Stockholm	Sweden
24.	Jelinek	Tomas	Berlin	Germany
25.	Jelinek	Claudia	Berlin	Germany
26.	Kapaun	Annette	Heidelberg	Germany
27.	Machad	Rita	Lisbon	Portugal
28.	Martin-Ramadan	Pablo	Madrid	Spain
29.	Matteelli	Alberto	Brescia	Italy
30.	Mørch	Kristine	Bergen	Norway
31.	Muehlen	Marion	Lisbon	Portugal
32.	Mühlberger	Nick	Berlin	Germany

33.	Neaves	Penny	London	UK
34.	Peyerl-Hoffmann	Gaby	Freiburg	Germany
35.	Rossi	Isabelle	Lausanne	Switzerland
36.	Schmid	Matthias	Newcastle	UK
37.	Seixas	Jorge	Lisbon	Portugal
38.	Siikamäki	Heli	Helsinki	Finland
39.	Soula	Georges	Marseille	France
40.	Trevino	Begona	Barcelona	Spain
41.	Vilalta	Ancara	Madrid	Spain
42.	Visser	Leo	Leiden	Netherlands
43.	Zoller	Thomas	Berlin	Germany

Saturday, 22nd September

Atouguia Jorge: Welcome

Tomas Jelinek: Presentation of the network situation (See workshop proceedings)

- Presentation of the network structures, rules & regulations
- Proposal for EC was sent from Italy (Zeno Bisoffi), everybody can join , 30 sites included (clinical sites and labs)
- Presentation of the map of sites, 52 member sites
- Database with ca 11.000 reported patients, electronic reporting should be increased
- Final diagnosis should be more specificated (malaria),
- 2/3 of all members are reporting electronically
- Short discussion about the posibility of website based reporting
- Half of the members would like to report through website
- Discussion of the uestionnaire: it is manly made for reporting of malaria, for schistosomiasis it is only approximate. Yet a text fiel dcan be used for additions. The questionnaire will only be changed for very important reasons
- Decrease in reporting of schistosomiasis and leishmaniosis- is there a lack of reporting or is the import to Europe of these cases decreasing?
- Standardized reporting at last once per month is proposed, even if there are zeor cases

- Announcement of the NECTM 2008- 2nd Nothern European Conference on Travel Medicine, 21-24 May 2008, www.nectem.com

- Member sites: TropNetEurop gained two new sites: Freiburg and Madrid, it excluded Hamburg (BNI), and lost again the Berlin Institute fo Tropical Medicine
- Total patients post travel: 55.000
- Total pre travel councelings: 190.000

- Provider yahoo: attechments are limited to max. 1MB
- The yahoo server blocks bouncing members, this can be triggered by automatic reply messages (e.g. out-of-office notices). Every member should receive at least two mails per month. If not, the mail address may be blocked- send a query to Tomas Jelinek!
- Old mails can be accessed by members at: http://yahoogroups.groups.com/tropneteurop

- 3 major papers within the network in 2006/2007, three further papers in preparation

- Filterpaper study: PCR is in this time not possible to be done in Berlin. Is their an other site to do it? Should collection going on and store for later on? Several sites are interested and will investigated he issue.

- Financial burden & work load for running the network
  - Time for reporting for every member site
  - Time & equipment for data entry (staff paid in Berlin)
  - Time & equipment for data analysis (done by Nick, paid a fee by Berlin)
  - Time for reports
  - Time for mailing list management
  - Time and fees for web site

- Schistosomiasis: cases are decreasing. More reports are needed to give meaningful data. A consensus is reached that we continue reporting for the moment, but that numbers will be closely monitored.

- TropNetEurop is developing and has moved from mere surveillance / data collection
  - Statement on Artesunate Use
  - Statement on on Malaria Chemoprophylaxis in India
  - Statement on Statement on Latin America

  Consequences:
  - Wide acknowledement
  - Publication in Eurosurveilaance and by PEG
  - Request for other position papers from Eurosurveilance

- Collaboration with outside organistion/other networks
  - Geosentinel
  - ENIVD: Yellow Fever Vaccine Surveillance
  - ECDC, Eurosurveillance
  - WHO

- Side effects of yellow fever vaccination are discussed. Is there room for a prospective study?

Ongoing studies:

- MALHIV study- very difficult to get data
- Dengue Study- finished, successfully, published
- MALTHER study- finished
- Filterpaper study- is open, needs a new laboratory
- Artesunate Therapy Questionaire – Thomas Zoller will talk about later on

Study proposals

- Surveillance programme for EU FP7
- Survey on migrant health care in Europe – proposal will be presented by BCRT Berlin
- Leishmaniais Study Proposal will presented by Basel

ECDC Preparedness & Response: Katrin Leitmeyer Stockholm (presented by T. Jelinek)

- Methods and structure of the ECDC are presented
- A network of experts is an potentially interesting partner
- Network coordinator will keep contact to ECDC and see how things are developing

The Lisbon Institute of Hygiene and Tropical Medicine and travel and tropical medicine in Portugal

Jorge Atouguia, Lisbon

As in several other Tropical Medicine Institutes all over the world, Travel Medicine started at the Lisbon Institute of Tropical Medicine and Hygiene (IHMT) back in the beginning of the 19th Century, when colons where lectured before starting a new life in Africa or some other far away country.

After the independence of the Portuguese colonies in 1975, most of the clinical activities were severely reduced. Consequently, travel advice in the Institute was limited to sporadic cases of individuals travelling to Portuguese-speaking countries for cooperation or business.

The emergence of modern patterns for international travelling forced IHMT to reorganise its clinical services. The Travel Medicine Clinic is presently able to provide up to date pre-travel information and post-travel management for international travellers, through its integration in Internet emerging diseases and Travel medicine E-mail lists. As this is an under-explored area in Portugal, much work has been done involving information and coordination activities within the framework of the Health Ministry, in collaboration with travel clinics all over the country.

Travel advice, vaccination and outpatient consultation (which also includes Tropical Paediatrics) is available 5 days a week upon personal, telephonic or E-mail contact. The annual number of travelers/patients is around 3000 and more that 1500 telephone, fax and e-mail counselling is provided to travellers, travel medicine specialists, other physicians and health workers. Since 1999 the Institute has a co-operation protocol with the Portuguese Council for Refugees (CPR), allowing refugees and asylum seekers to be directed to the IHMT for medical screening and care.

The Travel and Tropical Medicine Clinic is a WHO-approved Yellow Fever vaccination center. During 2006, 5 685 yellow fever vaccines were administered. Low consumption vaccines must be presently externally obtained. Additionally, several important anti-parasitic drugs and drug formulations can be found at the Clinic.

A Central laboratory provides valuable support, including parasitological, microbiologic, serologic tests and limited routine tests. This laboratory is a national reference in Parasitology and Mycology.

Clinical activities are integrated in IHMT's teaching and research structure in collaboration with the entomology, parasitology, microbiology, and international health divisions of the IHMT. The clinical experience of the Teaching and Research Unit of the Clinical Division is applied to the Courses the Unit offers: Travel Medicine, Tropical Medicine Clinics for Nurses and Clinics of Tropical Diseases for MDs.

Future prospects of the Travel and Tropical Medicine Clinics of the IHMT are based in the consolidation of its reference position in Portugal for Parasitic Diseases and Tropical Medicine. The strengthening of health cooperation with other travel centers in Portugal and Portuguese-speaking countries is another short-term objective of this Unit. Computerization of the reception, outpatient consultation, laboratory and vaccination activities and integration into a web-based information and clinical services supplier are also programmed, that will improve team performance and allow implementation and evaluation of collaboration/research protocols.

Discussion / Questions

- Connections with Portuguese speaking African countries- but no clinical centres abroad
- Several Courses on Travel or Tropical Medicine
- There are no specialized wards for tropical medicine in Portugal. This is a problem, because there is no clinical experience and no diagnostic training for tropical medicine
- Official numbers of malaria e.g. are completely different (lower) than the numbers in the institute seen
- Any qualified doctor in Portugal can practice travel medicine- many knowledge gaps
- Portuguese traveller goes mainly to Angola and Brazil, less going to Asia (but this is increasing)
- Only five centres in the country are vaccinating yellow fever

The contribution of field and laboratory studies for the understanding of putative resistance mechanisms to artemisinin derivatives in malaria parasites –

Pedro Cravo, Axel Martinelli, Isabel Ferreira, Ana Afonso, Louise Rodrigues, Paul Hunt & Virgílio E. do Rosário. CMDT/IHMT/Biologia Molecular, Universidade Nova de Lisboa, Portugal; IIIR, University of Edinburgh, Scotland

Artemisinin derivatives are the only compounds that still retain high efficacy against the human malaria parasite *Plasmodium falciparum*, but recent data begins to suggest that resistance may also develop against them. In an effort to identify putative modulators of artemisinin responses the artemisinin-sensitive clone *P. falciparum* Dd2 was grown *in vitro* in the presence of increasing concentrations of artemisinin. A resistant strain named *P. falciparum* Dd2-ARTmut was obtained, whose artemisinin IC50 was 100nM. Artemisinin resistance in Dd2-ARTmut proved to be unstable in the absence of drug pressure, however. Comparison of gene copy numbers between the resistant parasites and their sensitive ancestors revealed that whilst *PfATPase6* remained as a single copy in Dd2-ARTmut, the resistant parasites had gained three extra copies of the *Pfmdr1* gene during the artemisinin selection procedure. Interestingly, *pfmdr1* amplification was retained even after reversal to sensitivity, indicating that at least in our model, this genotype may be a consequence of resistance, rather than a cause.

During a large scale study in Africa (Rwanda and Sao Tome and Principe) and Brazil, samples from infected patients were collected and phenotyped for artemisinin susceptibility. The *PfATPase6* gene was sequenced in a subset of the samples for the identification of mutations potentially linked with decreased susceptibility, but no associations were detected. However, provisional analysis revealed the presence of regional genotypes. These data are providing a snapshot of the current degree of genetic variation in potential candidates for artemisinin resistance and will be of value in future drug resistance monitoring studies.

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Disscussion / Questions

- In Africa more variations than in Brazil
- China? Would be nice to include in the study, but no partner around

Effect of chemoprophylaxis on time to onset and diagnosis in travellers with vivax malaria –

Ron Behrens Hospital for Tropical Diseases and London School of Hygiene and Tropical Medicine

Plasmodium vivax is the dominant species of malaria parasite in most areas outside of Africa. P. vivax causes considerable morbidity and infections are characterised by relapses at different intervals as a result of the activation of liver-stage hypnozoites. P. vivax strains from different geographic zones tend to display different relapse patterns. In general, strains from subtropical or tropical zones are associated with early primary infections followed by frequent relapses at short intervals, whereas strains from temperate zones are associated with primary infections that tend to be delayed, with fewer relapses. Mixed relapse patterns are observed in some areas. The determinant of P.vivax relapse patterns and other factors influencing relapses remain unclear. A number of epidemiological studies of P. vivax presentation in returned travellers highlighted that the majority of presentations occurred >2months after return and despite the use of chemoprophylaxis. These studies suggest the use of chemoprophylaxis may be a factor in this later presentation. I will review the current knowledge of the factors influencing onset and relapse of P. vivax malaria and present from two separate data sets, the association of prophylaxis use and onset of vivax malaria in returned travellers and the influence of chemoprophylaxis on the presentation of clinical disease. I will then open a discussion whether chemoprophylaxis has a role in travellers visiting areas where P. vivax predominates. I will examine the potential benefits and risks of withdrawing prophylaxis use for such travellers and alternative strategies.

Discussion / Questions

- Does chemoprophylaxis have a role in travellers visiting areas where P. vivax predominates? Ron will examine the potential benefits and risk of withdrawing prophylaxis use for such travellers and alternative strategy
- Time from return to diagnosis is longer if taken prophylaxis, longest with CQ prophlaxis
- What would be the morbidity of P.vivax when given no prophylaxis?
- Does the risk warrant prophylaxis?
- Role of standby treatment?
- In Germany, Switzerland, Austria: no prophylaxis for P.vivax, even though there are severe cases seen
- UK gives prophylaxis
- Cloroquine has severe side effects
- Cost benefit analysis warranted

Malaria prophylaxis for Short-term Travellers

- Discussion basis: Swiss guidelines, see workshop proceedings
- No discussion about specific drugs intended – they are different in every country
- Use of exposure prophylaxis is not in debate
- Discussion goal: Statement on Malaria Prophylaxis from TropNet

- Problem when not providing chemoporphylaxis: time is too limited to explain the patient everything to know for using of stand by therapy. Answer : 20-25 minutes per patient is enough, all information in writing at the end of the consultation

- Problem: Qualifed diagnosis needed. Who can guarantee for good clinics, physicians? Answer: malaria diagnosis is possible, even self diagnosis by dipstick tests is posible by trained travellers. Better treatment is provided than when it is not. Swiss/Austrian/German experience shows declining malaria patient numbers, no deaths due to misconceived standby strategies.

- Evidence for malaria risk must be sought.
- Example travel to Thailand: No change in malaria cases when changed prophylaxis

- Risk of malaria is actually decreasing in most countries
- Can we find a denominator

- Problem: Limited knowledge and experience of those whop use the guidelines. Not recommending chemoprophylaxis will not be understood. Answer: Swiss experience tells otherwise.

- More unification of recommendations is needed to enchance the credibility of pre-travel councelling with international travellers.

Standby treatment - pro/con

Pro	Con
▪ No side effects from chemoprophylaxis ▪ No overdrugging of traveller population ▪ Cost/benefit? ▪ Swiss example ▪ Pice of chemoprophylaxis ▪ Serving clients by providing homogenous recommendations in Europe	▪ Wrong diagnosis ▪ Wrong treatment ▪ Councelling time needed ▪ Relatives might sue us ▪ Sudden changes may be necessary ▪ Too complicated for councelling practise? ▪ Price of standby treatment ▪ Change of national policies is big issue ▪ Need for qualified local medical care

Statements on malaria chemoprophylaxis in Latin America and the Indian Subcontinent have already ben agreed upon and are published. There is no debate about Afruican destinations. Thus, only countries in East and South East Asia are left. Following the methods already used for earlier statements, TropNetEurop will undertake a collection of information from the data base, the member sites, and international sources for a risk assessment.

Sunday, 23nd September

Epimigra: clinical and laboratorial evaluation of migrants in Lisbon –

L. Távora-Tavira, Rosa Teodósio, Jorge Seixas, Jorge Atouguia, Unit of Clinics of Tropical Diseases, Centre for Malaria & Tropical Diseases, Institute of Hygiene & Tropical Medicine of The Universidade Nova de Lisboa, Portugal

Background: For geographical and recent historic reasons, Portugal is a gateway and home for immigration from sub-Saharan countries. Misconceptions related to these populations often lead to consider them as high-frequency clusters for dissemination of infectious diseases, namely sexually transmitted infections (STI's). Epidemiological evidence-based data is needed to elucidate these issues and baseline prevalence studies are the starting point for this and thus, a project for epidemiological studies of transmittable diseases was started in 2001, denominated EopiMigra. Methodology: A prospective study was conducted in 497 migrants recently arrived in Portugal, at the time of their first consultation. Forty six percent of the individuals had clinical symptoms and in 32% was identified at least one transmittable disease, mainly intestinal parasitosis (10%) and sexually transmitted diseases (20%). In a subset of 220 African migrants (171 men and 49 women) the presence of STI´s was evaluated using a clinical syndromic approach and biological confirmation for gonorrhoea, *Chlamydia trachomatis* genital infection, syphilis, Hepatitis B and Human Immunodeficiency Virus (HIV) infection. Results: Global prevalence of the targeted infections were 1.8% for gonorrhoea, 0 % for *Chlamydia* infection, 4.1% for Syphilis, 5.9% for HBsAg presence and 7.3% for HIV infection. Globally, 16.4% of the studied persons had at least one sexually transmitted infection. Conclusions: We concluded that prevalence rates encountered in this population is similar to that of non-migrant Portuguese populations with a high risk for sexually transmitted diseases. Therefore migration from sub-Saharan Africa doesn't seem to constitute a particularly critical isolated factor for public health risk of STI´s in the community. We present and discuss the results of the identified transmittable diseases in the global migrant population studied at EpiMigra.

Discussion / Questions:

- Which screening test for asymptomatic persons coming from Sub Sahel-Africa?
- What about TB skin test?
- Migrants came only once to consultation, so tests have to be done at once
- Drugs given? Blind treatment? That may well be cost effective
- Need to focus more on HIV and Syphillis, STI

Chagas disease in migrants in France –

M Develoux, Service de parasitologie, Hôpital Saint-Antoine, 184 rue du Faubourg Saint-Antoine, 75012 Paris France

Chagas disease was an extremely rare imported infection in France. From 1980 to 2004 only two cases were published. They were two French travelers who made a short stay in South America. These two patients had an acute form of the disease. From 2004 to 2007, 13 cases were diagnosed in two teaching hospitals from Paris. All patients were Bolivian migrants recently arrived in France. Five had an indeterminate chronic form, four a chronic Chagas cardiomyopathy. Four are still under exploration, three are symptomatic. French clinicians are not familiar with the disease. In the first of our cases with cardiac involvement etiological diagnosis was missed and evocated only four months after the implantation of a pace-maker. Another problem was the lack of serological methods available in France, only immunofluorescence was used in a parasitological department of Paris. First sera had to be send for confirmation with another method to other countries (Brazil or Belgium). Now Chagas disease is a reality in France, and different methods for serologic diagnosis are used. Because of the emergence of the parasitosis in French Guiana, measures for control of transfusion risk were taken first in this department and more recently in metropolitan France.

Discussion:

- Why not stain blood products with gentiana or treat them with UV light uin order to make them safe. Why import everything from France into French Guyana? Answer: only low numbers needed (200,000 inhabitants).
- Oral transmission of chagas diseas through juice – cases from Brazil, too

Rapid Diagnosis of Imported Malaria by a 2nd generation HRP-II based test and Expert Microscopy in Febrile Returned Travellers –

J Cuadros, P Martín-Rabadán, FJ Merino, A Delgado-Irribarren, S Garcia-Bujalance, JM Rubio, Madrid-Spain

Malaria is the most potentially dangerous imported parasitic disease in Spain and other european countries and laboratories must be prepared round the clock to diagnose the disease quickly to start treatment and avoid complications. In recent years, a second generation of rapid diagnostic tests combining the detection of a soluble *Plasmodium* antigen, the histidine-rich protein II (HRP-2) and aldolase, an antigen common to all species of *Plasmodium*, has been marketed and proved to be useful. As a recent meta-analysis showed that HRP-2 based tests are superior to the lactate dehydrogenase (LDH) tests in diagnosis of malaria in non-inmune returned travellers ,we decided to perform a multicentric study to determine the performance of a HRP-2 based diagnostic kit (NOW® ICT) and expert microscopy in comparison to multiplex PCR as gold standard with a target population mainly composed by febrile semi-immune and non-immune and travellers returned from Africa.

Between 31/01/2005 and 31/08/2006, 221 patients were enrolled in the 5 centers. Sixty six (66) cases were positive by PCR (29 %; mean age, 31 years ± 16, interval, 3 months to 62 years); of those, 59, 2, 3 and 2 were identified by multiplex PCR as *P. falciparum*, *P. vivax*, *P. ovale* and *P. malariae*, respectively. Absolute parasitemia was rated as negative (15, 23 %), very low (3, 5%), low (26, 39 %), moderate (8, 12 %), high (7, 11%) and undetermined (7 [11%]; in these patients parasitemia was reported only as relative proportion of parasitized red blood cells). In most cases (95 %), malaria was acquired in West Africa, mainly in Equatorial Guinea and Nigeria (83%) by recently arrived immigrants (less than 3 months, 24%) or first or second generation immigrants residing for long term in Spain and travelling back to their countries for visiting relatives and friends (65%).

The sensitivity, specificity, positive predictive value and negative predictive value of the HRP-2 based test and the thick film, respectively, in comparison with PCR for the diagnosis of malaria were: 84 % [95% CI, 76-93] *vs* 77 % [95% CI, 67-87], 98 % *vs* 98 %, 96 % *vs* 94 % and 93 % *vs* 91 %. In five patients (4 *P falciparum* and 1 *P vivax* infections; 8 % of all diagnosis) treatment was started because a positive NOW® ICT test was found, even though the thick film was negative. The PCR confirmed later the diagnosis.

In our population, mainly composed by West Africans with *P. falciparum* infection, NOW® ICT has shown to be a specific tool (98%, 95% CI, 96-100%) for diagnosis of malaria, with similar sensitivity as expert microscopy (84 % *vs* 77%) in comparison with multiplex PCR.

Discussion:

- Semiimmune and non-immune travellers may yield different results
- 2nd generation tests are much better than 1st generation. No more false negatives despite high parasiteaemia.

August – September 2007: an oubreak of Chikungunya in Northern Italy –

Zeno Bisoffi, Centro per le Malattie Tropicali, Ospedale S. Cuore, 37024 Verona, Italy

135 cases of acute febrile illness, predominantly characterized by headache, myalgia, arthralgia and rash with dates of onset from 4 July to 28 August 2007, were observed among residents of Castiglione di Cervia and Castiglione di Ravenna, two adjacent villages in Ravenna Province, Emilia Romagna Region, divided by the River Savio. The acute phase of the illness which lasted 3-4 days was followed by prolonged severe asthenia. Eleven (11) cases required admission to hospital, including an 83-year-old man with multiple co-morbid chronic diseases who subsequently died.

The age range was 1 to 95 years, and 52% of the cases were females. The highest number of cases (11) was observed on 17 August 2007 with a marked decreasing trend in new cases noted since 21 August 2007. Preliminary epidemiological investigations conducted by local and national health authorities have identified an individual who returned from southern India at the end of June 2007 as the possible source of infection (source: W.H.O. REGIONAL Office, Europe). On 23 August 2007, local health authorities of Ravenna Province reported an outbreak of suspected arbovirus infection to the Ministry of Health, Italy. On 29 August, laboratory investigations performed on serum and blood samples obtained from potential cases at the Istituto Superiore di Sanità, Rome, confirmed chikungunya virus infection by immunoassay in 21 cases and by reverse transcription-polymerase chain reaction (RT-PCR) in six additional cases.

As of 13th September 2007, 254 cases of chikungunya (either confirmed or suspected) were notified in the Region. Chikungunya virus infection has been confirmed so far by laboratory tests in samples obtained from 78 patients (1). The majority of the cases have occurred in Castiglione di Cervia and Castiglione di Ravenna, whereas two additional clusters were detected in localities close to the towns of Cervia, Ravenna, Cesena and Forlí and Cesena Province. Additional, sporadic cases are being investigated in other localities of the following Provinces in Emilia Romagna Region: Ravenna, Forlí and Cesena, Rimini, Bologna, and Reggio Emilia (source: W.H.O. REGIONAL Office, Europe). Only a few days before the outbreak was made known, by coincidence, a description of chikungunya cases imported in Italy in 2006 was published by EID. The paper conclusion was as follows:

"The ability of A. albopictus to colonize new areas and its adaptability to the mild Italian climate allow vector populations to be active throughout the year (10). The patient is thought to be viremic for only 6–7 days (shortly before and during the febrile period) (6). We were unable to directly assess viremia levels; however, almost half the patients were still febrile on return to Italy, which suggests a potential risk.

Although the same mosquito is a potential vector of dengue, no autochthonous case has been reported as yet, despite annual reports of many imported dengue cases in Italy. On the other hand, the clinical manifestations of both conditions are nonspecific, and a hypothetical autochthonous case would most likely go undiagnosed unless a targeted surveillance system were established. Prompt reporting of imported CHIKV infections is essential for monitoring of potential risk. The possibility of introducing CHIKV into Italy cannot be ruled out on the basis of current evidence." (2)

Although the epidemic curve is descending, it cannot be stated yet that the outbreak is over. This is the first event resulting in subsequent indigenous transmission of chikungunya in Europe, at least in recent historical times. Given the presence of the competent vector documented in at least 12 European countries (Albania, Italy, France, Belgium, Montenegro, Switzerland, Greece, Spain, Croatia, the Netherlands, Slovenia and Bosnia-Herzegovina) as well as favourable climatic conditions for the vector to persist in the coming few months in the Mediterranean basin, countries should remain vigilant for the emergence of this infectious disease (source: W.H.O. REGIONAL Office, Europe).

1. R Angelini[1] AC Finarelli[2], P Angelini[2], C Po[2], K Petropulacos[3], P Macini[2], C Fiorentini[4], C Fortuna[4], G Venturi[4], R Romi[4], G Majori[4], L Nicoletti[4], G Rezza[4], Cassone[4] . An outbreak of chikungunya fever in the Province of Ravenna, Italy. http://www.eurosurveillance.org/ew/2007/070906.asp#1

2. Beltrame A, Angheben A, Bisoffi Z, Monteiro G, Marocco S, Calleri G *et al*. Imported chikungunya infection, Italy [letter]. Emerg Infect Dis [serial on the Internet]. 2007 Aug. Available from: http://www.cdc.gov/EID/content/13/8/1264.htm

Discussion:

- Thevector is less effective to transmitt dengue then chikungunya
- Should surveillance be put in place? Is there a role for travel clinics?
- The mosquito season was much worse this year than before.
- Portugal and Spain already hae this vectos and A. aegypti, too
- Was this a self-limitting outbreak? Probably yes. The area was strictly limited, weather is now cooler, adults unlikely to survive winter, transovary transmission unlikely

The Travel Medicine Faculty of the University of Glasgow - Peter Chiodini

Attempt to recognise travel medicine as part of the teaching curriulum of a medical school, should lead to acceptance as medical sub-specialty.

Malaria in migrants in the UK. Data from the Malaria Reference Laboratory and a plan for action –

Penny Neave, London School of Hygiene & Tropical Medicine, UK

There are 1500 to 2000 reports of imported malaria annually in the UK. About two thirds of all cases of falciparum malaria occur in London residents. These disproportionately affect those who go to visit friends and relatives abroad, and Nigeria and Ghana are the countries where most infections are acquired. Reports come from all areas of London, but with concentrations in particular geographical locations.

The "London Malaria Group" is a multi-disciplinary group, set up in 2003 with the aim of reducing the incidence of imported malaria in the Capital. Much of the work carried out to date has been on developing strategies for interventions to prevent and treat infections effectively. There are plans to simultaneously focus on several policy areas. These include: lobbying Governmental organisations, carrying out media campaigns and evaluating the effectiveness of prescribing anti-malarials on the National Health Service. Additionally there is a focus on ensuring local epidemiology is accurate and timely, and working with local African community groups to improve knowledge about the risk of acquiring malaria. Underlying the group's work are the Public Health principles of understanding the importance of the wider determinants of health, ensuring representation from the community most affected and using existing healthcare structures.

Discussion

- To go in schools to teach and make aware for malaria
- Everything is a matter of finances
- Political correctness makes discussion difficult, e.g. using words like "Africans" or "Africa"in the context of disease is now incorrect

The Exodus Software –

Richard Boyd & Graham Fry, Dublin & Richard Boyd, Exodus Software, www.exodus.ie

Exodus Software was founded by the Tropical Medical Bureau in Ireland to provide software solutions to Tropical and Travel Medicine practitioners. The applications and technologies developed (collectively referred as Exodus 1.0) are in daily use throughout the 20 clinics run under the Tropical Medical Bureau name. Many independent travel clinics also make use of the software. In the 3 years we have been working with other clinics we have learnt how diverse the requirements, preferences and protocols used in this branch of medicine can be. This has highlighted weakness in the software model developed, while suiting the Tropical Medical Bureau it lacks the flexibility to adapt to alternative approaches, for example travel clinics run by nursing staff.

At the Antwerp TropNet Europe conference in 2004 Exodus Software made a presentation on how emerging standards like HL7 and SNOMED is used by software applications to store and interpret medical information and how it could be applied to Tropical and Travel Medicine. These standards have begun to mature and we are slowly moving toward a scenario which will allow diverse medical applications to share information about a patient.

In the past year Exodus Software has been working to bring together these two strands of understanding. Exodus 2.0 is a complete architectural re-design of Exodus 1.0 building on its strengths while incorporating and allowing for the diversity which exists in practicing Travel and Tropical Medicine. In addition to this Exodus 2.0 is built to be compliant with HL7 and SNOMED standards.

The main focus of the presentation will be a practical demonstration of this new generation of software. The first module, for booking appointments, is being used today by the Tropical Medical Bureau. The presentation will conclude by outlining the road map for the future of Exodus 2.0.

Discussion

- Independent system
- Safe data management
- No public funding
- Subscription posible

Treatment of complicated malaria with Artesunate –

Thomas Zoller, Medizinische Klinik mit Schwerpunkt Infektiologie, Charite, Berlin, Germany

I.v.-artesunate is a promising alternative to quinine for the treatment of patients with severe falciparum malaria. A number of recent studies in Asia have shown that treatment with i.v.-artesunate is at least equally effective to treatment with i.v.-quinine. I.v.-artesunate may offer significant advantages in treatment due to its excellent efficacy and low potential for side-effects, particularly when compared with i.v.-quinine.
Systematic data on the number of patients with severe malaria, the form and the outcome of treatment is not available since data collected on national and European level as well as data from TropNet does not allow to classify patients accurately with falciparum malaria as severe vs. non-severe. There is no published data available from patients treated under intensive-care conditions in industrialised countries.

A research initiative within TropNet with the following goals is suggested:
1. To obtain reliable data on the number, the form and efficacy of the treatment and the outcome of patients with severe malaria in Europe by adding a reporting system for cases of severe malaria to the existing TropNet reporting infrastructure

2. To systematically evaluate the efficacy, safety and tolerability of i.v.-artesunate vs. standard treatment of severe malaria in European patients
3. To provide access to i.v.-artesunate manufactured under GMP-standards for TropNet members and partners

Discussion:

- No unification of Dx and Tx in Europe
- How many patients do we see in Europe and how do we treat them?
- Case report form is already in the proceedings
- Availability of the drug?
- Clarify legal issues
- Norway is using the drug already
- Is anaemia in the follow-up an issue?

Alberto Matteelli: The Italien Agency for drug regulationas issued a call for clinical trials- deadline is 30th September (letter of interes)

- 2 Options for clinical trials:
  - -the Sigma Tau drug
  - -the Chinese drug
- If interested send CV etc until 28th September to Alberto Matteelli.
- E-Mail will follow

European Observational Multicentre Study: Therapy of Uncomplicated Falciparum Malaria –

Martin Grobusch, Johannesburg

Therapy of imported uncomplicated falciparum malaria is by no means conducted uniformly throughout Europe. In fact, treatment strategies vary widely, as demonstrated by data obtained from TropNetEurop centres over the last years, and there is currently no standard therapy contributing centres would agree upon.

Centre-specific, and national, standards of care are based on data predominantly derived from therapeutic studies which have been performed in malaria-endemic areas. For epidemiological and biological reasons, these results are not always easily applicable to imported infections (large ethnically homogenous study cohorts, differences in the immune status of the hosts and vast variations of parasite strains from different geographic areas etc.).

The European multicentre MALTHER study conducted within the framework of TropNetEurop serves the purpose to observe and document current therapeutic strategies for uncomplicated falciparum malaria in order to make them comparable.

The study is now coming to a close, with recruitment ending at the end of October this year. The majority of cases (179 out of 305, or 64 %) has bene treated with atovaquoen/proguanil with approximately 15 % of all cases being treated with mefloquine and quinine and quinine combinations. This session will present a last interim analysis for efficacy of the first-line regimens, the therapeutic changes made necessary by adverse events, cure on D 28 and other key parameters prior to the final analysis to be begun towards the end of the year.

JE vaccine in travellers –

Ron Behrens, London & Christoph Hatz, Basel

The JE flavivirus causes a widespread disease in many rural parts of Asia, transmitted by Culex tritaeniorhynchus and other mosquito vectors. Children are more rarely symptomatic than older people, but the disease in endemic populations. Of those infected with the virus, around 1% develop clinical disease, one third die and one third develop permanent neurological sequelae. Fortunately, the risk of acquiring JE during travel to Asia appears to be very very low and only a handful of travel associated cases have been reported worldwide. This small risk may however be greater than contracting yellow fever. The risk has been estimated by some to be as high as, 1 in 5'000 per visit for persons staying in rural areas with paddy rice farming during the appropriate transmission seasons. Where there is a quantifiable risk, immunisation should with JE vaccine, should be recommended. The Swiss Expert Committee for Travel Medicine (ECTM) suggest that travellers spending 14 nights in endemic villages are at enough risk to require immunisation. However most travellers do not sleep close to rice paddies and this factor alone substantially reduces the risk of infection. Although the risk of severe adverse events is low in travellers and to date no fatal or anaphylactic reactions in travellers have been reported, a risk of vaccine against the benefit of avoided illness taking in to account the cost needs to be considered. We have investigated the risk of diseases, using surveillance reports of cases, serologically or clinically from the UK and Switzerland and plan to include other TropNet Europ members, along with the at risk population as the numbers of visits to endemic regions, adjusted by the numbers of travellers immunised, using doses of JE vaccine administered. This analysis will help define the risk of acquiring diseases and the likely population at risk of infection.

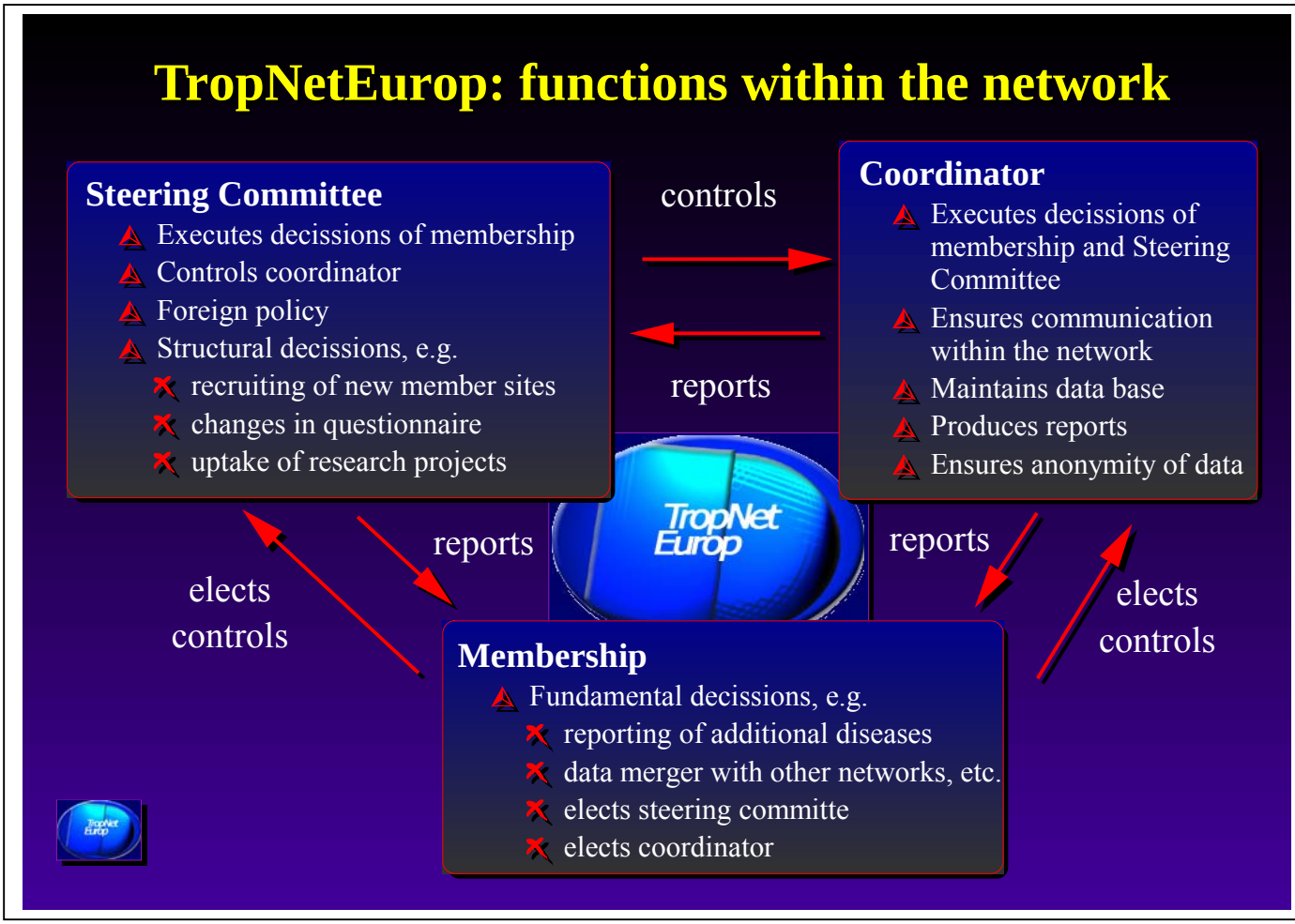
End of the meeting minutes 2007

MISSION AND GOALS OF TROPNETEUROP

- to maintain a collaborative network of European professionals dealing with imported infectious diseases;
- to create European consensus for clinical guidelines for diagnostic and therapeutic procedures in imported infectious diseases;
- to identify emerging pathogens by sampling returning international travellers, immigrants, and foreign visitors;
- to add information and accuracy to the current, divergent European systems of disease notification;
- to provide grounds for cluster investigation and intervention strategies by Public Health authorities;
- to provide the basis for permanent research collaboration of infectious disease centres in Europe

TROPNETEUROP: RULES & REGULATIONS

1. Membership only by clinical sites, no minimal number of patients
2. Exclusion criteria for members need to be defined, steering committee also decides on inclusion
3. Management structure: every site has one site manager and one vote (only when submitting data!)
4. Steering committee: five members including one network coordinator(elected for two years)
5. Regular meeting of membership every year necessary
6. All members decide on fundamental issues regarding the network
7. Members should decide on steering committee work at annual meetings:
   steering committee submits questions, proposals to all members, reviews research proposals
8. Network coordinator manages day-to-day work
9. Data are owned by all reporting members
10. Publication of results: all site managers of reporting sites are named as co-authors (in order of number of reported patients). TropNetEurop should always be mentioned. All publications go through review by steering committee.
11. Ownership of funds: though network infrastructure should be financed, funds will be managed by members that applied for them



CURRENT SITUATION OF TROPNETEUROP

TropNetEurop has started in April, 1999 with few selected members of TropMedEurop, the European Association for Tropical Medicine. From the beginning, support has been surprisingly strong and it has been very easy to recruit new member sites. TropNetEurop covers now 12% of all malaria patients in Europe and probably a similar percentage of patients diagnosed with dengue fever and schistosomiasis. The network has broadened its scope in membership with including sites who are not active in TropMedEurop and is now uniting many European centers of excellence in imported infectious diseases. After a major consolidation phase during the second half of 2000, when several inactive members opted to join the mailing list "friends & observers" rather then participating in the reporting system, recruitment of new member sites has continued. TropNetEurop wishes to interest all major European "centers of excellence" on Imported Infectious Diseases. Currently, the network has 51 members sites.

	N	%
Member Sites	51	100.0
Sites reporting electronically	32	61.5
Reported Patients	11935	100.0
Patients reported electronically	4043	33.9
Reported Diagnoses	11955	100.0
Malaria	9104	76.2
Schistosomiasis	1342	11.2
Dengue	1311	11.0
Leishmaniosis	198	1.7

Member sites of TropNetEurop:

No	Institution	Site Director
1.	Department of Infectious Diseases, Aalborg Hospital, Aalborg, Denmark	Dr. H. Nielsen
2.	Department of Infectious Diseases and Tropical Medicine, University Hospital of Aarhus, Skejby Hospital, Aarhus, Denmark	Prof. F.T. Black
3.	Prins Leopold Instituut voor Tropische Geneskunde, Clinical Services, Antwerp, Belgium	Dr. J. Clerinx
4.	Sección de Medicina Tropical, Hospital Clinic, Barcelona, Spain	Dr. J. Gascon
5.	Unitat de Malalties Tropicals, Importades i Vacunacions Internationales, Institut Català de la Salut, Barcelona, Spain	Dr. J. Gómez i Prat
6.	Swiss Tropical Institute, Basel, Switzerland	Prof. Dr. C. Hatz
7.	Centre for tropical medicine and imported infectious diseases (CTID), Division of infectious diseases, Medical Dept., Haukeland University Hospital, Bergen, Norway	Dr. K. Mørch
8.	Berlin Center for Travel & Tropical Medicine, Berlin, Germany	Dr. T. Jelinek
9.	Medizinische Klinik mit Schwerpunkt Infektiologie, Charite/Campus Virchow-Klinikum, Berlin, Germany	Dr. T. Zoller
10.	Consultation de médecine tropicale, Hôpital Avicenne, Bobigny, France	Dr. O. Bouchaud
11.	Médecine interne et Maladies tropicales, Hôpital St André-CHU, Bordeaux, France	Prof. DJM Malvy
12.	Bradford Royal Infirmary, Infection and Tropical Medicine, Bradford, UK	Dr. P. McWhinney
13.	Clinica di Malattie Infettive e Tropicali, Universitá di Brescia, Italy	Dr. A. Matteelli
14.	Surgeon General's Department, Army Medical Directorate, FASC Camberley, UK	Dr. A. Green
15.	Consulta de Medicina do Viajante, Departamento de Doenças Infecciosas, Hospital Universitário, Coimbra, Portugal	Prof. S. da Cunha
16.	Department of Infectious Diseases M 5132, University of Copenhagen, Denmark	Dr. I. Gjørup
17.	Tropical Medical Bureau, Dublin	Dr. Graham Fry
18.	SOD Malattie Infettive e Tropicali, Azienda Ospedaliero-Universitaria Careggi, Firenze, Italy.	Dr. A. Bartoloni
19.	J.W. Goethe Universität, Klinik II, Schwerpunkt Infektions- und Tropenerkrankungen, Frankfurt/Main, Germany	Prof. G. Just-Nübling
20.	Division of Infectious Diseases, Department of Medicine, Center for Infectious Diseases and Travel Medicine, University Hospital, Freiburg, Germany	Prof. W. Kern
21.	Institute of Maritime and Tropical Medicine, Gdynia, Poland	Prof. A. Kotlowski
22.	Tropenmedizin, Abteilung Tropenhygiene und Offentliches Gesundheitswesen, Universitätsklinikum Heidelberg, Germany	Dr. A. Kapaun
23.	Helsinki University Central Hospital, Dpt. of Medicine, Div. of Infectious Diseases, Helsinki, Finland	Dr. H. Siikamaki

24.	Epidemiological Services, Military Medical Academy, Hradec Kralove, Czech Republic	Prof. J. Beran
25.	Sorlandet Hospital, Kristiansand, Norway	Prof. S.G. Gundersen
26.	Travel Clinic, Policlinique Médicale Universitaire, University of Lausanne, Lausanne, Switzerland	Dr. B. Genton
27.	Dept Infectious Diseases, Section Travel Medicine, Leiden University Medical Centre, Netherlands	Dr. L.G. Visser
28.	Universidade Nova de Lisboa, Instituto de Higiene e Medicina Tropical, Lisbon, Portugal	Dr. J. Atougia
29.	Hospital for Tropical Diseases Travel Clinic, London, UK	Dr. R. Behrens
30.	Microbiologia Clinica, Ctra. de Meco, Alcala de Henares, Madrid, Spain	Dr. J. Cuadros
31.	Tropical Medicine & Clinical Parasitology Unit, Infectious Diseases - Microbiology Department, Hospital Ramon y Cajal, Madrid, Spain	Prof. R. Lopez-Velez
32.	Hospital Carlos III, Instituto de Salud Carlos III, Madrid, Spain	Dr. S. Puente
33.	Division of Infectious Disease, Fundación Jiménez Díaz, Madrid, Spain	Dr. M. de Górgolas
34.	Travel Medicine Unit, Hospital General Universitario Gregorio Marañón, Madrid, Spain	Dr. P. Martin-Rabadan
35.	Department of Infectious Diseases & Tropical Medicine, University of Munich, Germany	Dr. M. Schunk
36.	Centro per le Malattie Tropicali, Ospedale S. Cuore, Negrar (Verona), Italy	Dr. Z. Bisoffi
37.	Department of Infection & Tropical Medicine, Newcastle General Hospital, Newcastle-upon-Tyne, UK	Dr. M.L. Schmid
38.	Department of Infectious Diseases, Ullevaal University Hospital, Oslo, Norway	Prof. B. Myrvang
39.	Service de Parasitologie, Hôpital Tenon, Paris, France	Dr. M. Develoux
40.	Department and Clinic of Tropical and Parasitic Diseases, Karol Marcinkowski University of Medical Sciences, Poznan, Poland	Dr. M. Paul
41.	3rd Dep. of Infectious and Tropical Diseases, First Faculty of Medicine of Charles University in Prague, Czech Republic	Prof. Pavel Chalupa
42.	INMI L. Spallanzani, Rome, Italy	Dr. P. Ghirga
43.	Central Hospital of Rogaland, Stavanger, Norway	Dr. Åse Berg
44.	Karolinska Hospital, Department of Medicine, Unit of Infectious Diseases, Stockholm, Sweden	Prof. A. Björkman
45.	Karolinska Institute, Division of Infectious Diseases, Huddinge University Hospital, Stockholm, Sweden	Prof. U. Hellgren
46.	Osp. Amedeo di Savoia, Div. "A" Malattie Infettive, Torino, Italy	Dr. Guido Calleri
47.	Institut für Tropenmedizin, Eberhard-Karls-Universität Tübingen, Germany	Prof. J. Knobloch
48.	Clinc of Infectious Diseases, University of Udine, Italy	Dr. A. Beltrame
49.	Sektion Infektionskrankheiten, Universität Ulm, Germany	Prof. P. Kern
50.	Kaiser-Franz-Josef-Spital der Stadt Wien, 4. Medizinische	Dr. H. Laferl

	Abteilung mit Infektions- und Tropenmedizin, Vienna, Austria	
51.	Missionsärztliche Klinik, Würzburg, Germany	Dr. G. Stich

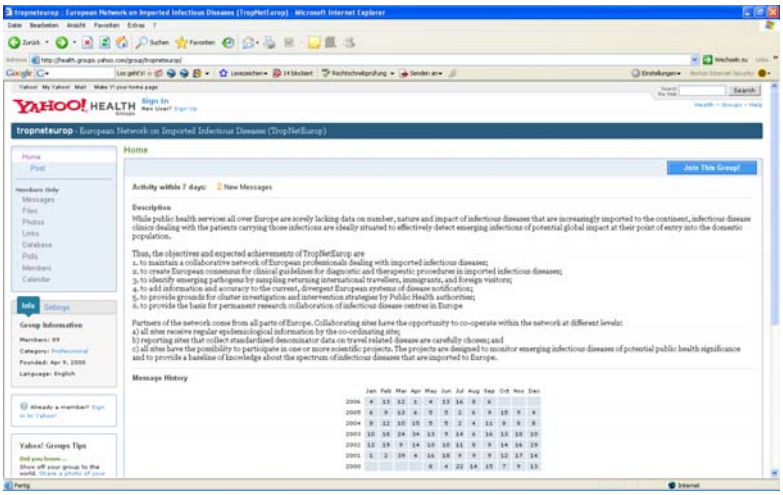
TropNetEurop: Members and Patient Encounters

Nº	Town	Site Manager	In- and outpatients [per year]	Pre-travel advises [per year]
1.	**Aalborg**	H. Nielsen	100	200
2.	**Aarhus**	F. T. Black	350	800
3.	**Antwerp**	J. Clerinx	7700	12000
4.	**Barcelona – Hospital Clinic**	J. Gascon	1400	6000
5.	**Barcelona - Drassanes**	J. Gòmez i Prat	6000	12000
6.	**Basel**	C. Hatz	2500	10000
7.	**Bergen**	K. Mørch	50	600
8.	**Berlin - BCRT**	T. Jelinek	1200	10000
9.	**Berlin - Charite**	T. Zoller	400	0
10.	**Bobigny**	O. Bouchaud	500	0
11.	**Bordeaux**	JMD. Malvy	500	12000
12.	**Bradford**	P. McWhinney	150	0
13.	**Brescia**	A. Matteelli	400	50
14.	**Camberley (UK Armed Forces)**	A. Green	0	0
15.	**Coimbra**	S. da Cunha	50	800
16.	**Copenhagen - CMP**	I. Gjørup	300	2000
17.	**Dublin**	G. Fry	1200	12000
18.	**Firenze**	A. Bartoloni	250	0
19.	**Frankfurt**	G. Just-Nübling	350	0
20.	**Freiburg**	W. Kern	250	350
21.	**Gdynia**	A. Kotlowski	100	200
22.	**Heidelberg**	A. Kapaun	1400	6000
23.	**Helsinki**	H. Siikamaki	300	0
24.	**Hradec Králové**	J. Beran	300	2000
25.	**Kristiansand**	S. G. Gundersen	50	0
26.	**Lausanne**	B. Genton	300	12000
27.	**Leiden**	L.G. Visser	200	2800
28.	**Lisbon**	J.V. Costa	400	3100
29.	**London**	R. Behrens	5000	8000
30.	**Madrid - Principe de Asturias**	J. Cuadros	100	100
31.	**Madrid - Ramon y Cajal**	R. Lopez-Velez	550	0
32.	**Madrid - Carlos III**	A. Benito	450	0
33.	**Madrid - Jiménez Díaz**	M. de Górgolas	100	200
34.	**Madrid- Gregorio Maranon**	P. Martin-Ramadan	600	150
35.	**Munich**	M. Schunk	1700	13000
36.	**Negrar (Verona)**	Z. Bisoffi	2000	1500
37.	**Newcastle**	M. Schmid	1500	300

38.	**Oslo**	B. Myrvang	1500	5000
39.	**Paris**	M. Deveroux	1500	6500
40.	**Poznan**	M. Paul	100	350
41.	**Prague**	P. Chalupa	600	500
42.	**Rome**	P. Ghirga	100	200
43.	**Stavanger**	A. Berg	100	0
44.	**Stockholm - Karolinska**	A. Björkman	1500	15000
45.	**Stockholm - Huddinge**	U. Hellgren	400	15000
46.	**Torino**	C. Galleri	800	2000
47.	**Tübingen**	J. Knobloch	1000	6000
48.	**Udine**	A. Beltrame	200	0
49.	**Ulm**	P. Kern	1000	2500
50.	**Vienna – KFJS**	H. Laferl	450	0
51.	**Würzburg**	G. Stich	300	450
	TOTAL approx.		**48250**	**181650**

COMMUNICATION

a) The Mailing List



The TropNetEurop mailing list is managed by the coordinator. Primarily for reasons of convenience, a group list at Yahoo!.com has been chosen for this purpose. All mailings to TropNetEurop go through this group servers and have been approved by the coordinator. The list server cannot be accessed by non-members. Only selected messages are forwarded to the outside by the coordinator. The list is one of the most valuable features of TropNetEurop, enabling all members to communicate rapidly in an exclusive setting.

b) Monthly Reports

Monthly reports on accumulated and analysed data have been mailed on (almost) monthly basis since April, 1999. Outfit and content of the reports have changed, feedback was overwhelmingly positive. TropNetEurop members receive the reports as WinWord-files which is supposed to make use of the graphics in lectures and presentations easy. Every figure can be copied to any presentation programme (such as PowerPoint) and modified for further use. In the same way as data in the data base are owned by all TropNetEurop members, so are reports and their content. Members can use the material without further permission, yet acknowledgement of the network is encouraged.

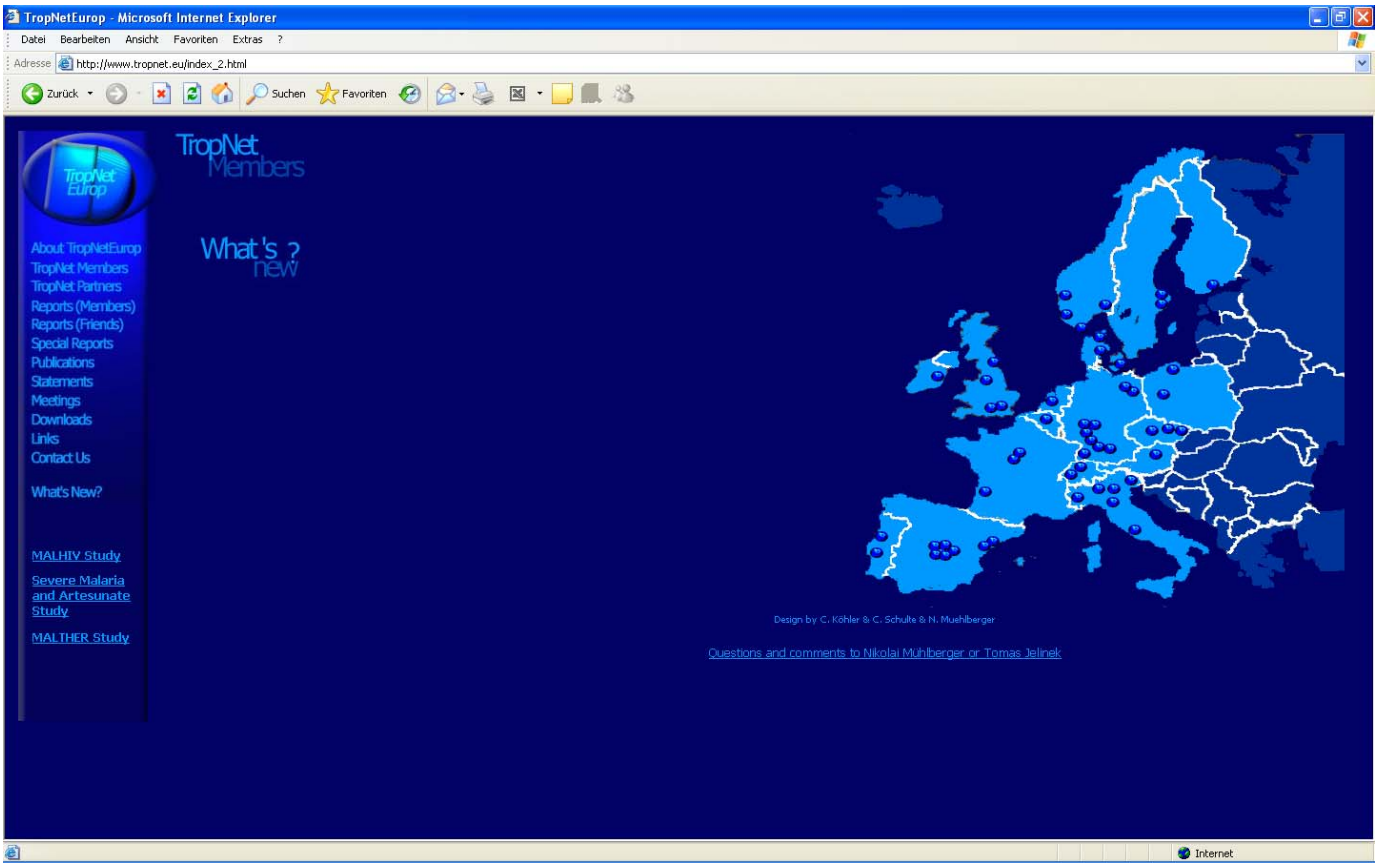
c) Recently published material:

- Fabrice Legros, Nikolai Muhlberger, Bjørn Myrvang, Heli Siikamäki, Leo Visser. The low and declining risk of malaria from Latin America: is there still an indication for chemoprophylaxis? *Malaria J* 6 (2007) 114

- Calleri G, Behrens R, Bisoffi Z, Björkmann A, Castelli F, Gascon J, Gobbi F, Grobusch MP, Jelinek T, Schmid M, Niero M, Caramello P. Variability in malaria prophylaxis prescribing across Europe: a Delphi method analysis. *J Travel Med* (submitted)

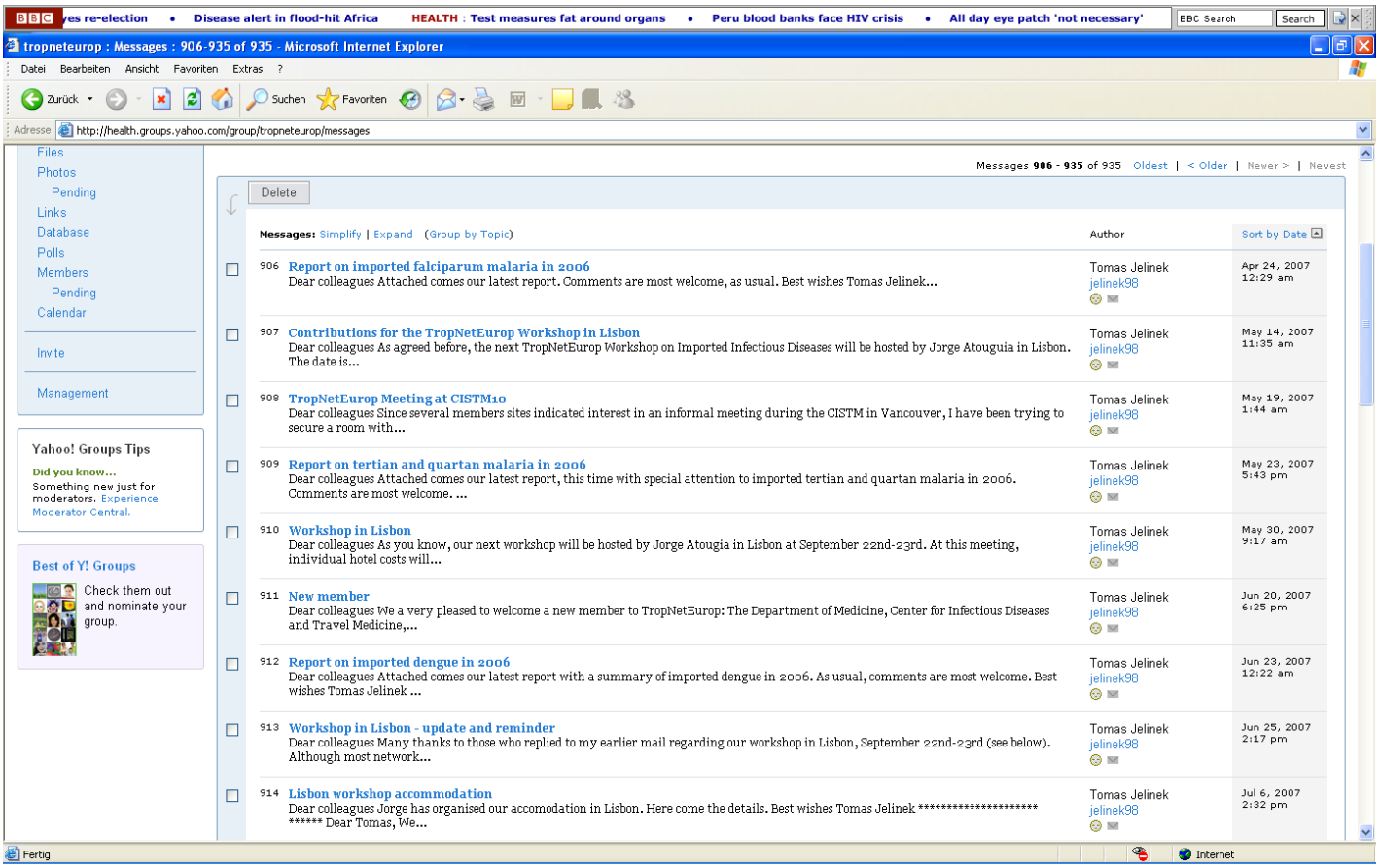
e) The Web Site

The TropNetEurop web site can be accessed by everybody at **www.tropnet.eu**. The site provides basic information on the network and its members, offers contacts to the coordinator and the members and informs about recent reports and "sentinel events". A password protected area for members only gives access to all reports of TropNetEurop. We do not monitor access numbers to the web site, but feedback has been predominantly positive. The award-winning site has been created by Clemens Schulte and is now managed by Nikolai Mühlberger.



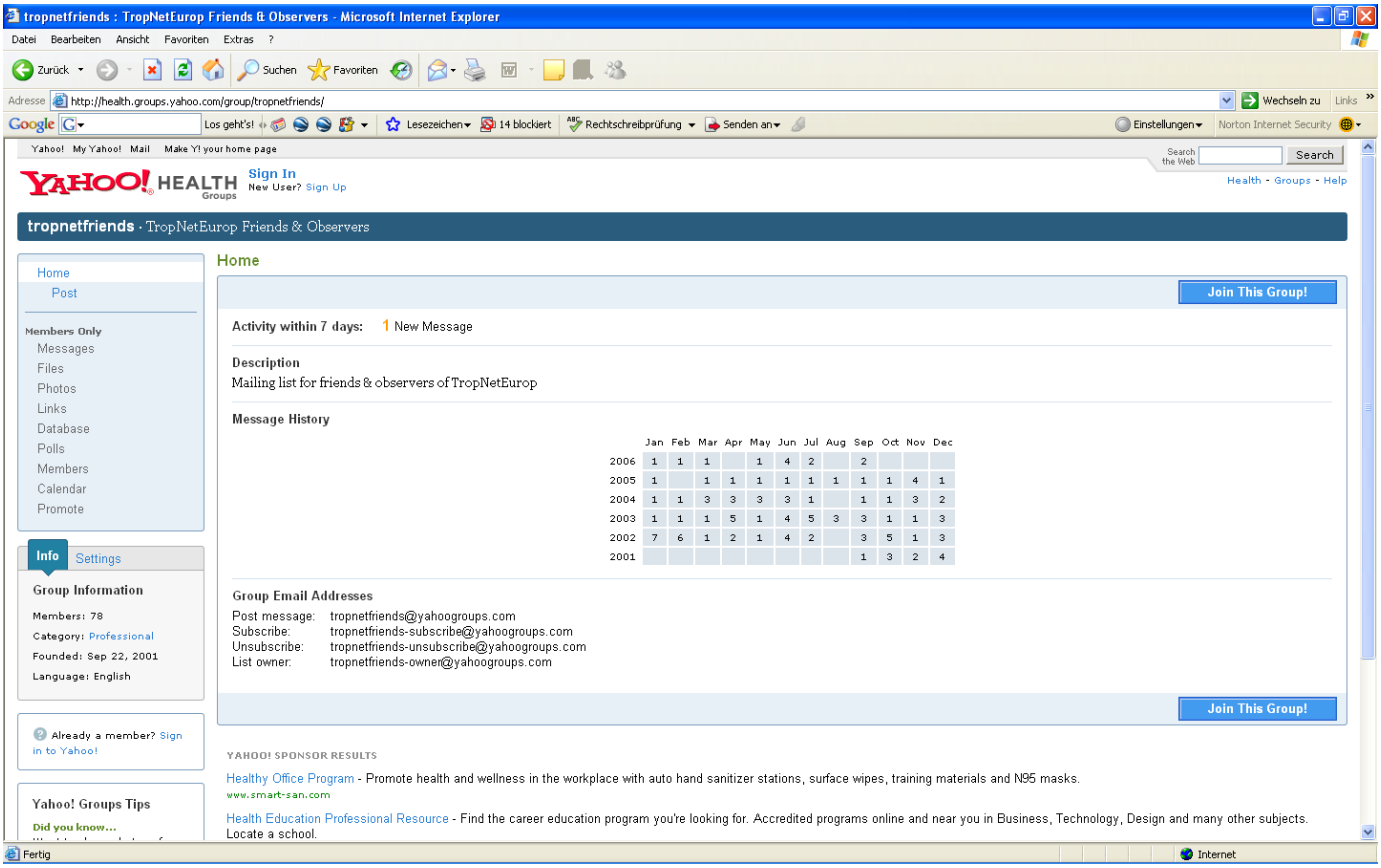
f) Special Reports and "Sentinel Events"

The extremely high level of awareness for "sentinel events" of all network members has ensured several impressive successes of TropNetEurop.



e) Friends & Observers

Following increasing demand, a second TropNetEurop mailing list had to be created. This list is targeting all interested medical staff, that are not able or willing to participate actively at TropNetEurop. It also aims to include public health staff in Europe, at WHO and in countries that are visited by European travellers. This list is managed by the network coordinator and is not open for discussion. Currently it has 89 members. Feedback has been overwhelmingly positive and close contacts to several recipients have developed. This has led repeatedly to the notification of "sentinel events" through members of this mailing list to TropNetEurop.



Surveillance Questionnaire for Imported Infectious Diseases (TropNetEurop)

(Fax to +49-30-36802844, att. Dr. T. Jelinek)

Clinic ID	Patient ID	Date Initial Visit (DD/MM/YY)	☐ Inpatient ☐ Outpatient	Inpatient days	Sex	Date of birth (DD/MM/YY)
		/ /			M F	/ /

Country of birth	Country of residence	Citizenship	If born outside Europe, give date of first arrival	(DD/MM/YY)
				/ /

HISTORY OF RECENT TRAVEL
List, in order, journeys to all countries relevant for this visit, and indicate most likely country of infection by checking

Trip Duration (number of days)	Trip Ended (DD/MM/YY)
	/ /

1.	☐	**4.**	☐
2.	☐	**5.**	☐
3.	☐	**6.**	☐

Detailed information on likely place of infection (town, area):

Pre-Travel counselling by health care provider? ☐ Yes ☐ No ☐ Don't know

Malaria Chemoprophylaxis: ☐ None ☐ Chloroquine ☐ Proguanil ☐ Mefloquine ☐ Doxycycline ☐ Atovaquone/Proguanil ☐ Other:

Compliant ☐ Yes ☐….No

Patient Classification

- ☐ Immigrant / Refugee
- ☐ Foreign visitor
- ☐ European, lives/works in Europe
- ☐ European, lives/works outside Europe (urban)
- ☐ European, lives/works outside Europe (rural)

Reason for most recent travel

- ☐ Tourism
- ☐ Visiting Relatives/Friends (VRFs)
- ☐ Business
- ☐ Immigration
- ☐ Research / Education
- ☐ Missionary/Volunteer/ Humanitarian
- ☐ Military
- ☐ Other

Chief complaint (CHECK ALL THAT APPLY)

- ☐ Asymptomatic Screening

Or:

- ☐ Fever
- ☐ Fatigue
- ☐ Skin
- ☐ Respiratory
- ☐ Headache
- ☐ Lymphadenopathy
- ☐ Musculoskeletal
- ☐ Diarrhoea
- ☐ Vomiting
- ☐ ENT
- ☐ Genitourinary
- ☐ Neurologic
- ☐ Psychologic
- ☐ Other:

Date of symptoms onset: (DD/MM/YY) / /

DIAGNOSIS AND TREATMENT	1. Notification Dx	2. Notification Dx	3. Notification Dx
Working Dx			
Final Dx			
How was Dx achieved? [1]	P D A SP M G C O	P D A SP M G C O	P D A SP M G C O
Treatment (1. drug)			
Treatment (2. drug)			
Treatment (3. drug)			
Treatment (4. drug)			

[1] ***Diagnostic Procedures:*** *P=Pathogen detection D=DNA detection A=Antigen detection SP=Antibody increase in serum pair (IgM or IgG) M=IgM detection G= IgG detection C=Clinical reasoning O=Other*

Accompanying Diagnoses: **1.** _____ **2.** _____ **3.** _____

COMPLICATIONS? ☐ Yes ☐ No If Yes, which? _____

DEATH? ☐ Yes ☐ No If Yes, why? _____

TropNetEurop - Monitoring of Intraveneous Artesunate Treatment in Patients with severe P. falciparum Malaria

Fax together with surveillance report of same patient to +49-30-36802844, att. Dr. T. Jelinek. In case of electronic reporting, please fill in TropNet/SIMPID ID assigned by your Sentry Software.

CLINIC ID	TropNet/SIMPID ID: (Fill in, if malaria case has been reported electronically)	Patient ID: (Fill in, if malaria case has been reported on paper)
	/ . . / : :	
Pre-treatment criteria of severe malaria:		
Artesunate producer:	**Artesunate batch number:**	

Treatment regimen including i.v. Artesunate:	First line Treatment? ☐ Yes ☐ No	
Date Day 1= Day of Dx and start of first line Tx (dd/mm/yy) / /	**Body weight**	**kg**

Administered anti-malarial substances		Start of administration	End of administration	Total dose
Drug1:	Artesunate i.v.	Day #	Day #	mg
Drug2:		Day #	Day #	mg
Drug3:		Day #	Day #	mg

Was the treatment course completed? ☐ Yes ☐ No	**if no, why**
Additional/Supportive treatment:	

Efficacy of i.v. Artesunate treatment regimen:	Duration of inpatient treatment:	days
Parasitemia on day 1: /µl	**Parasite clearance time** (Best estimate)**:**	hours
Temperature on day 1: °C	**Fever clearance time** (Best estimate)**:**	hours
Complications under treatment: ☐ None ☐ Malaria-related complication ☐ Treatment failure ☐ Bacterial superinfection ☐ Other		
Complications - details:		
Outcome: ☐ Cure without residues ☐ Cure with residues ☐ Exitus on day		
Outcome - details:		

Safety of i.v. Artesunate regimen:	Adverse drug reaction suspected? ☐ Yes ☐ No **if yes, specify below**

Adverse drug reaction (Please, fill in one line per suspected ADR)	Day of onset Day #	Day of resolut. Day #	Severity at time point of maximum intensity: mild, no specific medication needed	moderate, specific treatment needed	severe, disabling or life-threatening	Relation with Artesunate: No	Possible	Probable
1.			☐	☐	☐	☐	☐	☐

ECDC TENDER

Travel Medicine in Europe: existing structures, functions and added-value of ECDC. Building a network to support Travel and Tropical Medicine related activities at ECDC. OJ/2008/07/08-PROC/2008/019

Technical Proposal

A consortium of the steering group, the leads of the Work Programmes and the members of TropNetEurop provide the following detail and information to support the above bid.

The tenderer will be constituted by a consortium of the following individuals

Dr. Tomas Jelinek (main contractor)
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Tel +49-30-9606094-0

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Statement describing the services which can be provided by tenderers directly

All three work programs will be provided by TropNetEurop. A European Network on Imported Infectious Disease Surveillance founded in 1999. It is based around committed experts in imported infectious diseases and travel medicine whose goal is to effectively detect emerging infections of potential regional, national or global impact at their point of entry into the domestic population and respond to the threats by alerting Public Health authorities and trigger further investigations. Almost all members are involved in policy making and providing recommendations on travel medicine issues in their respective countries. They also serve as resource persons for tropical and travel medicine for governmental, medical and lay people in their countries. Sentinel Surveillance is carried out by the 51 participating sites using a standardised computerised system with anonymised patient and laboratory data contemporaneously sent to a centralised database in order to rapidly identify new events. TropNetEurop activities have so far been self-funded by the fact that they have been generously supported by the participating institutions and through the members, giving their time and expertise to a commonly shared ideal and interest without financial recompense. Its current range of activities are limited by this restriction.

The network currently consists of 51 sites throughout Europe. Distribution of the network and details of its activity are shown on the website of TropNetEurop (www.tropnet.eu). Each Site member contributes to the election of the steering committee which acts as an administrative body. The network is managed day to day by the elected network co-ordinator.

The Steering committee meets twice annually.. One meeting coincides with the annual network meeting. The annual meetings have taken place every year since 1999 and are a fundamental aspect of the organisation. Hosted by a member, this meeting enables scientific, educational and strategic interaction development of the network. It also brings a human perspective to an otherwise electronic network.

The programme, the meeting agenda, the minutes and the presentations are published on the web site of TropNetEurop (www.tropnet.eu). For the purpose of this tender, meetings can be held in Stockholm at ECDC and adjusted according to the new focus.

With the extensive links of 51 sites in 17 European countries, members, and partners, TropNetEurop is the largest and only fully functional European travel medicine network. It thus provides an ideal structure to examine and collate the current practice of travel and tropical medicine as a resource review. TropNetEurop has already undertaken similar exercises looking as specific aspects of public health including the varied use of anti-malarials across Europe and drug availability at members sites

(TropNetEurop survey: stocks of anti-trypanosomiasis drugs within Europe) and a survey of isolation facilities for highly contagious patients within Europe. A recent research study of malaria prescribing differences within Europe is a further example of the collaborative potential of the network and how it has already been used.

TropNetEurop has demonstrated on several occasions that it is capable of identifying sentinel events in travellers. Rapid dissemination of information on such outbreaks as: falciparum malaria in travellers from the Dominican Republic, Dengue Fever in tourists from Thailand, African trypanosomiasis in travellers from Tanzania, falciparum malaria in illegal Chinese immigrants in Italy and Chikungunya in italy, has verified the ability of the network to detect unexpected events and alert public health bodies of a new threat.

Most of the members are associated with and work within centres of excellence both in clinical and academic settings. They are often leaders in their specialist areas and advisors to national and international bodies. The large number of experts and range of expertise provides a large pool of individuals who could be called upon for advice and support in many areas of tropical/travel medicine and infectious diseases. We have significant partnerships with other specialist groups including the tropEd Network a network of European institutions for higher education in international health and the European Network for the Diagnostics of "Imported" Viral Diseases (ENIVD) with whom we have extensive and long standing collaboration and publications. The members and steering group are closely involved with members of the International Society of Travel Medicine, and provide support, and work with, WHO and other international groups in South America, Africa and Asia.

2.3.1 WP 1: Secretariat and information management of the network

2.3.2 WP 2: Travel medicine resources review

2.3.3. WP 3: Support to ECDC's Epidemic Intelligence and Response activities

EUROPEAN RESEARCH

The Unit Preparedness & Response, ECDC

Pedro Arias, Stockholm

No abstract available

Tropical Medicine in Madrid

Juan Cuadros, Madrid

The Community of Madrid, with a 15,85 % of registered foreign population in 2008 (total population, 6.251.876) has experienced in the last years one of the fastest growing rates of migration in Europe with persons coming mainly from Latin America, Africa and East Europe. In the last century, as in most European countries, patients arriving from the former subsaharian African Spanish colonies (Fernando Poo and Rio Muni, an island and small part of continent located in West Africa forming what today is known as Equatorial Guinea) were treated in dedicated institutions, like the Hospital del Rey, a centre specialized in imported tropical diseases.

This hospital is nowadays named Hospital Carlos III and has an active Tropical Medicine Unit and a Travel Clinic which attended more than 6000 patients in 2007. However, Tropical Medicine and International Health in Madrid has evolved in the last decades from a highly specialized clinical discipline enclosed in reference centres to an interdisciplinary area of knowledge closely related to the day to day management of foreign patients and travellers. In this sense, the Tropical Medicine Unit of the Hospital Ramón y Cajal is providing since more than 20 years health care to migrants and travellers in a tertiary general hospital and has become a reference at national level, attending about 1500 patients per year.

In other hospitals, like Hospital Príncipe de Asturias of Alcalá de Henares, where the rate of migrant population can reach up to 20 %, the high demand of diagnosis and treatment of imported diseases has promoted an active area of research, teaching and collaboration with other centres, like the Laboratory of Parasitology of the National Centre for Microbiology of Majadahonda, where most of the serological and molecular diagnosis of our patients is performed.

Besides, in recent years, small Units of Tropical Medicine have been created in different hospitals, and some of them joined TropNetEurop (Hospital Gregorio Marañon y Fundación Jimenez Diaz). It must be mentioned as well that a group of clinical parasitologists working in general hospitals joined recently to collaborate in research in malaria and Chagas disease (Parasitology Group of Madrid).

Different institutions also offer courses in Tropical Medicine and International Health, like the National Centre for Tropical Medicine and the National School of Public Health or the Fundación Jimenez Diaz and Hospital Príncipe de Asturias www.curso-medicina-tropical.es.

Tropical Medicine in Madrid: research from Ramon y Cajal

Rogelio López-Vélez, Madrid

No abstract available

Clinical problems associated to *P. ovale*

Gerardo Rojo, Madrid

Plasmodiun ovale infection has been thought to have a low prevalence, a benign clinical course and a limited geographic distribution in areas of tropical Africa and the islands of southeast Asia. Recent epidemiologic studies based on the use of PCR has increased the prevalence up to 15% in some areas of West Africa (May, 1999) and Papua New Guinea (Mehlotra, 2000). It has also been reported in the Middle East, Indian Subcontinent, Yemen and southeast Asia. An increasing number of patients from West Africa is being seen in our area, where *P. ovale* represented 7% of our malaria cases including one locally acquired (Cuadros, 2002).

Although classically considered a benign malaria, severe complications like spleen rupture and anemia can be seen as in *P vivax*. However, in our short series of *P ovale* infections (n = 12) we treated a patient who developed an Acute Respiratory Distress Syndrome, the second case reported in the medical literature (Rojo, 2008)

Another clinical problem that we found was the trigger of a vaso-occlusive and acute chest crisis in a homozygous patient for sickle-cell disease.

Diagnosis of *P ovale* infections is based on microscopy, although recent epidemiological studies have shown limited sensitivity in patients with negative thick films and positive PCR (Mueller, 2007). Due to the difficulties of microscopical diagnosis of this species, in some cases it can be confounded with other *Plasmodium* or be occult in a mixed infection, what could preclude a radical cure of the patient.

It is important to include this infection in the differential diagnosis of fever after travel to *P. ovale* endemic areas, specially in the case of delayed fever, even in patients who have taken correctly malaria prophylaxis.

Severe P.vivax and drug resistance genes

Hernando del Portillo, Barcelona

No abstract available

Clinical and epidemiological research in Chagas in migrants

Joaquim Gascon, Barcelona

American trypanosomiasis or Chagas disease is a zoonotic infection endemic to Latin America. In endemic countries, about 8 million people are carriers of the disease, approximately 50,000 new cases are diagnosed every year, and fatal cases are estimated at 14,000 per year[1]. Traditionally considered to affect poor people in rural communities of Latin America, *T. cruzi* infection is now progressively appearing in urban environments[2] including those in non-endemic countries[3]. In these areas where the vector is not present, *T. cruzi* may be transmitted mainly through blood transfusions, organ transplants and congenitally via infected mothers. Despite this knowledge and confirmed reports of *T. cruzi* infection through congenital transmission[4,5] and blood transfusion in non-endemic countries[6], little attention has been paid to ensuring optimal screening and control measures.

The seroprevalence of *T. cruzi* infection in pregnant women in Latin America ranges from 2% to 51%[7], with higher rates in rural areas of Bolivia[8,9]. Infants infected with *T. cruzi* may have a severe and threatening disease, but most are asymptomatic. Thus, *T. cruzi* infection in pregnant women of Latin American origin and their neonates in industrialised countries is probably underestimated, as most children infected vertically will follow an asymptomatic clinical course and no routine screening is performed in most of these countries. However, cases of congenital transmission have already been reported in Europe[4,5]. Consequently, and considering that early detection and treatment of neonates soon after delivery shows the best therapeutic results[10], the health authorities in these countries will benefit from accurate data on the disease in order to manage this emerging public health risk.

Another challenge for the European Health Systems concerns the blood and tissue banks. Transmission of Chagas disease via blood transfusion has been recognized since 1952[11]. In a recent study from Barcelona, the seroprevalence of *T. cruzi* infection among at-risk donors (including spaniards living for years in Latinamerica) in Catalonia was 0,62%. Beside migrants, the (this) result emphasizes the need to include individuals who have resided in, but were not necessarily born in endemic areas as at-risk donors[12].

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Chagas disease in Spain

Maria Flores, Madrid

In recent years, Spain has become one of the favourite destination for Latin American immigrants. Currently, Chagas disease is an emerging imported parasitosis. Moreover, the Latin American citizens had achieved a good degree of social integration in Spain, and even they often voluntarily and altruistically support blood donation programs.

However, despite technological advances and wide Latin American experience, there is not a gold standard laboratory technique for diagnosing Chagas disease.

Therefore, bearing in mind this new epidemiologic context, the aims of the Parasitology Department are (i) the evaluation of the diagnostic tests in house for the anti-*T. cruzi* antibody detection, (ii) the comparison and evaluation of the commercial ELISAs and rapid tests used in Spain, (iii) the evaluation of PCR use, and (iv) a review of imported Chagas disease in Spain.

Our results showed that most of the Chagas diagnostic tests available in Spain have a good sensitivity and specificity, 92-100% and 98-100% respectively.

On the other side, from 1997 to 2007, we have analysed samples of 7150 individuals with suspicion of *Trypanosoma cruzi* infection. The average prevalence in subjects attending different health centres was 22%, while in blood donors ranged from 0,1% to 2%. The congenital transmission index was 4% and 5 cases of blood transmission were confirmed. As in endemic areas, the parasitemia by PCR is around 56% in chronic patients, although it can reach 70% in seropositive pregnant women. Most of the seropositive individuals were from Bolivia.

Taking account these data, it is important to highlight the need to promote the serological screening for *T. cruzi* on at-risk population and the proper treatment of all infected subjects.

SATURDAY, 4TH OCTOBER 2008

Case report: fatal dengue fever in Norway

Bjørn Waagsbø & Svein Gunnar Gundersen, Kristiansand

Fatal Dengue shock syndrome in an adult Norwegian traveller returning from Thailand with a primary infection

Several *Aedes* mosquito species are responsible for dengue virus transmission to humans, feeding blood meals at both night and daytime. Although most cases suggest that asymptomatic infections are the main outcome of dengue virus exposure, both mild, self-limited dengue fever (DF) and occasionally life-threatening conditions known as dengue haemorrhagic fever (DHF) and dengue shock syndrome (DSS) occur, requiring advanced hospital care. Most of these serious complications are seen in endemic countries, and very few cases have been reported in travellers. In this case report we present the clinical features, supportive therapy instituted, and outcome of a serious case of dengue shock syndrome in a Norwegian adult female traveller from Thailand.

Declining incidence of Malaria Imported into the UK from West Africa

Behrens R H. Carroll B, Smith V, Alexander N, London

The study was designed to examine the trend of imported malaria from West Africa into the United Kingdom (UK) in UK residents and foreign visitors between 1993 and 2006, and examine the changes in travel to the region, and the factors which may influence malaria imported into the UK. The objective was to attempt to define their contribution and influence on the trend of imported malaria, and how this might inform malaria prevention policy.

A denominator based on overseas travel by UK residents to West Africa was collected as part of the International Passenger Survey, and the the duration of nights spent in there region collected through the same methodology. The numbers of visits by West Africa residents to the UK was also examined. Cases of malaria from West Africa were based on surveillance reports provided to the MRL through laboratory and clinical case reports, where data on region of visit and reason of visit was available. Reason for travel was stratified by visiting friends and relatives (VFR) and all other reasons for travelling (non-VFR).

Despite travel doubling over the study period, there has been almost no increase (5%) in the number of imported malaria cases. Non-VFR travellers' cases fell by a third, with VFR's showing a 15% increase

We were able to generate, for the first time, the incidence of malaria per 1000 years exposed in UK travellers to West Africa. This analysis revealed a 3.7 fold reduction in imported malaria, a 9.8% annual decline in VFR's and a 7% in non-VFR's with a similar trend in West African visitors to the UK (7.9%).

The reduction in malaria may be associated with many factors, the parallel reduction of malaria in West Africans suggests that there may be a local cause of reduced malaria transmission in UK residents and visitors to and from the region.

M/XDR-TB-Situation in South Africa

Martin Grobusch, NHLS and Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

South Africa is part of one of the hardest-hits regions worldwide regarding the TB-HIV co-pandemic. Failure to adequately treat and contain drug-sensitive tuberculosis has paved the way to the emergence of drug-resistant TB; from multidrug resistance defined as loss of the two backbone drugs INH and rifampicin, to multi-drug resistant strains for which few treatment options are at hand.

Following a short overview on the epidemiological situation, this talk will offer some insight into management efforts as implemented in Johannesburg, Gauteng province, South Africa. Treatment data from Sizwe Hospital, a 260-bed M/XDR-TB treatment facility, give evidence that if all available measures are implemented, death rates can drop to below 25 %, with cure rates within the same range and the remaining majority of patients becoming stabilized if remaining on therapy, with HAART being concomitantly administered to those individuals being coinfected with HIV – these figures stand in stark contrast to those stemming from the Tugela Ferry outbreak, where 52/53 individuals found to be XDR-TB infected succumbed to their disease.

Eminent political and ethical issues will be touched upon, and the work of the recently established research unit particularly in the field of drug development will be briefly mentioned.

Treatment of complicated malaria with Artesunate

Thomas Zoller, Berlin

Artesunate for i.v.-use in severe malaria and the TropNet Europ Artesunate Study

Artesunate as intravenous formulation is increasingly used by treatment centres across Europe for the treatment of severe malaria after studies from SE Asia showed a survival benefit in patients with high parasitaemia and an acceptable safety profile of the drug. At present, artsunate for i.v.-administration can only be obtained from a Chinese manufacturer, not being produced under GMP standards.

In European non-immune patients, artesunate as an alternative to quinine for the treatment of severe malaria promises to offer advantages not only in terms of improved survival, but also for reduced adverse reactions, particularly when compared to quinine. The latter advantage is particularly of importance for the growing number or European travellers with e.g. cardiac and other comorbidities. Apart from case studies in Europe and Phase I and II trials in the U.S., no prospective study data on efficacy and safety in non-immune patients is available to date.

Currently, artesunate is not licensed in the EU, but has received the orphan drug designation from the European Medicines Agency EMEA. The orphan drug designation provides a framework of measures for research and market introduction of artesunate.

Due to unforeseen technical problems in the manufacturing process, the company holding the orphan drug designation and future manufacturer of GMP-artesunate has informed the network that the drug will not available before the last quarter of 2009 or the first quarter of 2010.

TropNetEurop has issued a statement in the year 2005 supporting the use of i.v.-artesunate for severe malaria together with a call to monitor the use of the product. The TropNet Severe Malaria and Artesunate Study provides a platform for collecting information about the use of the drug across European centres, and its safety and efficacy. All TropNet members are encouraged to report all patients with severe malaria to the network making a significant contribution to pharmacovigilance and preparation for an comprehensive evaluation of i.v.-artesunate.

Regularly updated information on availability, the process of licensing, the TropNet project study protocol and the reporting form, used in addition to the regular TropNet case reporting form, can be obtained from www.artesunate.info, a website of TropNet Europ.

Severe falciparum malaria treated with artesunate in Norway

Mørch K[1,2], Strand Ø[3], Dunlop O[4], Berg Å[6], Langeland N[2], Leiva RAM[2], Longva, JÅ[2,*], Sjursen H[2], Skrede S[2], Sundal J[6], Jensenius M[5]

Address: [1]National Centre for Tropical Infectious Diseases and [2] Unit for Infectious Diseases, Department of Medicine, Haukeland University Hospital, Bergen, [3] Department of Medicine, Akershus University Hospital, Nordbyhagen, [4]Department of Acute Medicine, Ullevål University Hospital and [5]Department of Infectious Diseases, Ullevål University Hospital, Oslo, and [6]Stavanger University Hospital, Unit for Infectious Diseases, Department of Medicine, Stavanger, Norway . *Present address: Department of Medicine, Aalesund Hospital, Aalesund, Norway.

No abstract available.

Malaria Rapid Diagnostic Tests - Where do we go from here?

Peter Chiodini, London

This presentation will focus on the problems encountered with malaria rapid diagnostic tests in clinical use, factors which may adversely affect their stability and performance and the need to provide a robust process for product assessment and quality assurance

There is always a light at the end of the tunnel: The MALTHER study

Martin Grobusch, NHLS and Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

Over the past years, several TropNetEurop centres contributed patients to MALTHER, the network's prospective, observational study of the therapy of uncomplicated falciparum malaria. About a year ago at the Lisbon meeting, it was decided to analyse the accumulated data, whilst the data base was left unlocked for further entries for the time being.

Difficulties with the handling of the database and the lack of an opportunity to overcome this deadlock by having a brief data analysis strategy meeting have caused some delay. We attempt to overcome these problems at the fringe of this meeting in order to get this research project accomplished.