Diagnosis and Specific Surveillance of Rickettsioses

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Background:
The rickettsioses—zoonotic bacterial infections transmitted to humans by arthropods—were for many years considered to be oddities in travel medicine. During the previous decades, however, reports of hundreds of travel-associated cases have been published worldwide, the vast majority being murine typhus caused by Rickettsia typhi, Mediterranean spotted fever caused by Rickettsia conorii, African tick bite fever caused by Rickettsia africae, and scrub typhus caused by Orientia tsutsugamushi. Since ecotourism and adventure travel are increasingly popular worldwide, and since new diagnosis tools have been made available, the incidence of travel-associated tick-borne diseases has increased. Epidemiological and clinical aspects of rickettsial diseases in 280 international travelers reported to the GeoSentinel surveillance network 1996-2008 have been investigated. 231 (82.5%) cases of spotted fever group (SFG) rickettsiosis, 16 (5.7%) cases of scrub typhus, 11 (3.9%) cases of Q fever, 10 (3.6%) cases of typhus group rickettsiosis, 7 (2.5%) cases of bartonellosis, 4 (1.4%) cases of indeterminable rickettsiosis, and 1 (0.4%) case of human granulocytic anaplasmosis were reported. However, many new rickettsioses have emerged worldwide.

Objectives:
The objectives of the survey include:
- To give access to EuroTravNet members the diagnosis tools available at the WHO coll. Center for Rickettsioses and Other bacterial arthropod borne diseases
- To increase the knowledge rickettsioses in Europe
- To increase the knowledge of imported rickettsioses in Europe

How to Process:
- Inclusion criteria include the clinical suspicion of rickettsial disease by the clinician. Rickettsial disease is understood in its largest definition, including spotted fever and typhus group rickettsioses, anaplasmosis and ehrlichiosis. Also Q fever and bartonellosis will be tested.
- Forms can be downloaded from the web page “Extra Tasks – Specific Surveys” to indicate epidemiological and clinical data of your patients. Please join this form to your samples. The samples needed are also indicated there.

Note:
- The diagnostic tests coming from out EuroTravNet members out of France will be performed free of charge. Reference diagnostic tools will be used and the results will be given in a few days.
- Fresh sample as well as frozen samples are welcome.
- We provide here diagnostic tools and diagnostic expertise for patients. Therefore, there should not be any ethics committee issue, and your request doesn’t need to be anonymous. The WHO coll. Center receives many samples everyday from everywhere and provides the results in a couple of days. The name of your patients will not be enter in any database and data used for any analyses will be strictly anonymous. However, for those of you who need to sent anonymous data, you can use an ID number instead the name of your patient.
PUBLICATIONS
If a significant number of cases has been obtained after 1 or 2 years, a report will be written and submitted in a peer review journal as a “report of the EuroTravNet network”. Authorship and author ranking will be organized using guidelines adapted from geosentinel guidelines. The leading author will be the one in charge of the first draft of the paper. The last author will be a member of the WHO coll. Center. Other will be ranked depending on the number of cases and contribution in analysis/writing. However, clinicians from all sites could also interact directly with the WHO coll. Center to report cases of interest without waiting for a global analysis.

REFERENCES: