EUROTRAVNET SCIENCE WATCH: APRIL 2011


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**Scientific advances**

**Hepatitis A seroprevalence in a population of immigrants at a French vaccination center.**


**Summary:**
A 82.4 % hepatitis A seroprevalence was estimated in a population of 646 immigrants at a French vaccination center, before travelling to an HAV-highly endemic area. There was a significant difference according to the continent of origin (90 % in persons originating from Sub-Saharan Africa). More than 75 % of seronegative patients were less than 36 years old and less than the half had stayed more than 18 years in a developing country. In multivariate analysis, age, length of stay in the highly endemic country and continent of origin were independent factors for acquiring natural immunity against hepatitis A.


**Public Health significance:**
Until very recently, migrants originating from developing countries were considered as naturally immune against hepatitis A. However, the improvement of hygiene conditions and socioeconomic status has lead to a decrease of HAV seroprevalence in many developing countries. In particular, the age of acquisition shifted from childhood to adulthood. These results suggest the importance of broadening the screening of HAV immunological status in travelling immigrants in order to optimize the vaccination coverage of this population. If time is lacking, HAV vaccination should be proposed to immigrants less than 36 years old.
Scientific advances


**Summary:**
Using surveillance data obtained from 21,888 imported *P. falciparum* cases in France during 1996-2003, factors independently associated with severe malaria (832 cases; ≈3.8%) were older age, European origin, travel to eastern Africa, absence of chemoprophylaxis, initial visit to a general practitioner, time to diagnosis of 4 to 12 days, and diagnosis during the fall-winter season.


**Public Health significance:**
Infection with *Plasmodium falciparum* malaria remains a major risk for European travelers returning from malaria-endemic areas. This strongly-built study confirms the relevance of severity factors identified in non immune travelers. It emphasizes the lack of awareness of the practitioners and public concerning malaria. It strengthens the importance of anti malarial chemoprophylaxis.
Scientific advances

Intravenous artesunate for severe Malaria in Travelers, Europe.


Emerging Infectious Diseases. 2011 May; 17(5): 771-7.

Summary:
This study describes the outcome of 25 travelers with severe malaria who returned from malaria-endemic regions and were treated at 7 centers in Europe with intravenous artesunate. All patients survived and treatment rapidly reduced parasitemia levels. Unexplained hemolysis occurred after reduction of parasitemia levels in some of them.

Link to the article: http://www.ncbi.nlm.nih.gov/pubmed/21529383

Public Health significance:
Multicenter trials in Southeast Asia have shown better survival rates among patients with severe malaria, particularly those with high parasitemia levels, treated with IV artesunate than among those treated with quinine. In Europe, quinine remains the primary treatment for severe malaria. This study suggests the clinical and parasitological efficacy of IV artesunate in a non immune population. It opens the door for the use of IV artesunate in imported cases in Europe. However, artesunate is not available in all European countries and its use may require administrative procedures. The need for controlled studies and pharmacovigilance programme in Europe is now open to discussion.
**Scientific advances**

**Personal protection against biting insects and ticks.**

PPAV Working Groups.


**Summary:**
Intended for health care professionals and travelers, this document includes recommendations for Personal protection against vectors (PPAV), following the outline established by the French High Health Authority (HAS). The paper finally proposes two decision trees based on the transmission type (day or night) and kind of stay (short or roaming, long and steady). It concerns travellers, but also expatriates, residents and nomads.


**Public Health significance:**
This document highlights the need to take into account the risk of vector-borne diseases, and the benefit of various methods of personal protection. The choice of methods is clearly oriented towards those whose effectiveness has been proven and potential risks assessed.
Letter to the Editor


Emerging Infectious Diseases. 2011 May; 17(5): 943-45.

Summary:
A case of imported quinine-resistant *P. falciparum* malaria in a French traveller returned from French Guiana.


Public Health significance:
This case reminds primary care providers to use atovoquane-proguanil, arthemeter-lumefantrine, quinine-doxycycline or quinine-clindamycine, as a first line therapy for treating patients with falciparum malaria acquired in French Guiana.