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EUROTRAVNET SCIENCE WATCH : JULY 2009

Scientific Advances – Holiday souvenirs from the Mediterranean: Three instructive cases of visceral leishmaniasis. Buonomano et al. *Scand J Infect Dis.* 2009 Jul 10:1-6.

Scientific Advances – Nifurtimox-eflornithine combination therapy for second-stage African *Trypanosoma brucei gambiense* trypanosomiasis: a multicentre, randomised, phase III, non-inferiority trial. Priotto G, et al. *Lancet.* 2009 Jul 4;374(9683):56-64.

Scientific Advances – *Rickettsia slovaca* and *R. raoultii* in Tick-borne Rickettsioses. Parola P, et al. *Emerg Infect Dis* 2009; 15(7) Jul, 1105-08

Scientific Advances – A global study of pathogens and host risk factors associated with infectious gastrointestinal disease in returned international travellers. Swaminathan A, et al. *J Infect.* 2009 Jul;59(1):19-27.

Scientific Advances – *Aedes albopictus*, an arbovirus vector: From the darkness to the light. Paupy C, Delatte H, Bagny L, Corbel V, Fontenille D. *Microbes Infect.* 2009 May 18. [Epub ahead of print]

Scientific Advances – Holiday souvenirs from the Mediterranean: Three instructive cases of visceral leishmaniasis.

Buonomano R, Brinkmann F, Leupin N, Boscacci R, Zimmermann A, Muller N, Fux CA

Scand J Infect Dis. 2009 Jul 10:1-6.

Description

The authors report 3 Swiss cases of visceral leishmaniasis presenting with fever of unknown origin and pancytopenia and review current diagnostic and therapeutic concepts.

[Link to the article](http://www.informaworld.com/smpp/content~db=all?content=10.1080/00365540903104127)

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ECDC comment: 2009-07-15

With expanding travel activities, visceral leishmaniasis increasingly occurs in non-endemic areas and may affect immunocompetent individuals with no other risk factor than holidays at the Mediterranean coast. Patients with fever of unknown origin living or after a trip in Southern Europe should be tested for leishmaniasis, particularly during the Spring and Summer when sandfly vectors are active.

Keywords : leishmaniasis

Scientific Advances – Nifurtimox-eflornithine combination therapy for second-stage African *Trypanosoma brucei gambiense* trypanosomiasis: a multicentre, randomised, phase III, non-inferiority trial.

Priotto G, Kasparian S, Mutombo W, Ngouama D, Ghorashian S, Arnold U, Ghabri S, Baudin E, Buard V, Kazadi-Kyanza S, Ilunga M, Mutangala W, Pohlig G, Schmid C, Karunakara U, Torreele E, Kande V.

Lancet. 2009 Jul 4;374(9683):56-64.

Description

Treatment options for second-stage *Trypanosoma brucei gambiense* human African trypanosomiasis are limited to melarsoprol and eflornithine. Intravenous eflornithine requires 56 infusions over a 14-day period, which limits its use in the field. This randomized phase III study convincingly shows that a shorter and simpler treatment of eflornithine (14 infusions over 7 days), when combined with 10-day oral nifurtimox (NECT), is as safe and efficacious as the standard 14-day eflornithine regimen.

[Link to the article](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61117-X/fulltext)

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)61117-X/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61117-X/fulltext)

ECDC comment: 2009-07-15

As soon as the final study results were available, NECT was introduced in the WHO essential medicines list 2009. The shorter and simplified regimen should allow more patients to have access to an eflornithine-based therapy. Moreover, the use of combined drugs may prevent or delay the emergence of parasite strains resistant to eflornithine. The development of new drugs, preferably oral, remains urgently needed for the treatment of human African trypanosomiasis.

Keywords : *Trypanosoma* - Africa

Scientific Advances – *Rickettsia slovaca* and *R. raoultii* in Tick-borne Rickettsioses

Parola P, Roveery C, Rolain JM, Brouqui P, Davoust B, Raoult D.

Emerg Infect Dis 2009; 15(7) Jul, 1105-08

Description

Tick-borne lymphadenopathy (TIBOLA), also called *Dermacentor*-borne necrosis erythema and lymphadenopathy (DEBONEL), is defined as the association of a tick bite, an inoculation eschar on the scalp, and cervical adenopathies. The authors identified the etiologic agent for 65% of 86 patients with TIBOLA/DEBONEL as either *Rickettsia slovaca* (49/86, 57%) or *R. raoultii* (7/86, 8%).

[Link to the article](http://www.cdc.gov/eid/content/15/7/pdfs/1105.pdf)

<http://www.cdc.gov/eid/content/15/7/pdfs/1105.pdf>

ECDC comment: 2009-07-15

TIBOLA/DEBONEL is a newly recognized syndrome, and its incidence is likely underestimated. TIBOLA/DEBONEL is probably the most frequently diagnosed rickettsial disease in Europe, except during the dry summer period. TIBOLA/DEBONEL is seen throughout Europe, particularly during February–May and during September–November, linked with the activity of *Dermacentor* ticks. Doxycycline remains the treatment of choice, with new macrolides as alternative treatments

Keywords : *Rickettsia* – Ticks - Europe

Scientific Advances – A global study of pathogens and host risk factors associated with infectious gastrointestinal disease in returned international travellers

Swaminathan A, Torresi J, Schlagenhauf P, Thursky K, Wilder-Smith A, Connor BA, Schwartz E, Vonsonnenberg F, Keystone J, O'Brien DP; for the GeoSentinel Network.

J Infect. 2009 Jul;59(1):19-27.

Description

The authors have analysed the Geosentinel network database (1996-2005; www.geosentinel.org) that revealed that of 25,867 travellers reporting for medical assessment following international travel, over a quarter were diagnosed with an IGD. The authors show here that host characteristics, region of travel and category of traveller, significantly impact on the relative likelihood of presenting with a broad range of pathogen-specific IGD. Presentation of IGD by specific pathogen varied markedly dependent on geographic region of recent travel, and reason for travel.

Link to the article

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WJT-4WDNKR2-1&_user=4876078&_rdoc=1&_fmt=&_orig=search&_sort=d&_docanchor=&view=c&_acct=C000009002&_version=1&_urlVersion=0&_userid=4876078&md5=843c2be87bd0424335f32e36ffe4bd28

ECDC comment: 2009-07-15

Infectious gastrointestinal disease (IGD) is a significant cause of morbidity in returned international travellers. The authors have performed the largest comprehensive analysis of microbiologically confirmed infectious gastrointestinal disorders reported in a population of returned travellers. A broad range of pathogens is implicated. The limitations of the study are discussed by the authors and these results are of interest for all physicians and public health institutions dealing with returned travellers

Keywords : Travel - diarrhea

Scientific Advances – *Aedes albopictus*, an arbovirus vector: From the darkness to the light.

Paupy C, Delatte H, Bagny L, Corbel V, Fontenille D.

Microbes Infect. 2009 May 18. [Epub ahead of print]

Description

In the last 30 years, the Asian tiger mosquito, *Aedes albopictus*, has spread dispersed worldwide and has recently been presented as a efficient vector of Chikungunya virus (CHIKV). The authors review the current geographic range and the relevant biological traits of *A. albopictus* in order to explain its rapid spread. They discuss recent changes in its role as a vector and its importance in the current and future emergence of pathogens.

[Link to the article](#)

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VPN-4W9XBJD-1&_user=113324&_rdoc=1&_fmt=&_orig=search&_sort=d&_docanchor=&view=c&_acct=C000009002&_version=1&_urlVersion=0&_userid=113324&md5=5a43918ccedaa6186579d7c04edd2d69

ECDC comment: 2009-07-17

This review is very useful to understand why several countries in Europe are susceptible for *Ae. albopictus* transmitted diseases, particularly Italy, where the mosquitoes are active from February through December, with a peak in August and September. CHIKV implantation and spread with the arrival of travelers with high CHIKV viremia became reality in Italy with the outbreak which developed in summer 2007. The presumed index case was a man returned from India. Chikungunya outbreaks have been recently described in South-eastern Asia. Therefore future imported cases and European outbreaks are expected. Interestingly, the authors report conventional and innovative ways to control *A. albopictus*.

Keywords : Chikungunya – *Aedes albopictus*