

CONTINUING IMPORTATION OF FALCIPARUM MALARIA FROM GOA INTO EUROPE

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A case of falciparum malaria acquired in Goa, India, has recently been reported to the European Network on Imported Infectious Disease Surveillance (TropNetEurop, <http://www.tropnet.net>). The report relates to a Swedish woman in her fifties who had spent two weeks in Goa (Candolim beach) and Kerala in India without taking malaria chemoprophylaxis. In mid-December 2007, approximately two weeks after returning to Sweden, she fell ill with fever and a mild cough. Ten days after the onset of symptoms, thick and thin films were done and an infection with *Plasmodium falciparum* with a parasitaemia of 1.8% was diagnosed. The patient was admitted to hospital, uneventfully treated with a standard dose of mefloquine and discharged four days later.

This case report provides more evidence of the continuing risk of falciparum malaria infection in Goa. A popular winter resort for European tourists, Goa was until last year considered an area of very low-risk of malaria infection for travellers. However, during the 2006-7 winter season, eight cases of *P. falciparum* cases among tourists returning from Goa were reported to TropNetEurop, whereas in the previous two years there had been no reports of malaria in European travellers to this area [1]. An increased incidence among the indigenous population was also confirmed by local authorities.

Since December 2006, 19 malaria cases imported from India have been reported, among which 13 were explicitly identified as coming from Goa. The cluster of eight cases reported in the winter of 2006-7 coincided with a period of intense rainfall (50% above average) in the Goan and Konkan region, which had begun in October 2006 [2]. However, reports of malaria cases imported from Goa have continued despite changes in the season and the amount of rainfall. Since last winter, five more cases have been reported over a period of several months, including the most recent one described above.

It appears that there may be a continuously increased risk of malaria transmission. TropNetEurop has therefore been recommending malaria chemoprophylaxis to all travellers to Goa since 2007 [3]. All tourists who intend to visit this region of India are also advised to use mosquito bite avoidance measures. Visitors may consider using the World Health Organization's type IV prevention [4], which is mosquito bite prevention plus chemoprophylaxis with atovaquone/proguanil, doxycycline, or mefloquine, or they may consider travelling with emergency standby treatment. Anyone who becomes unwell while on holiday or shortly after their return should seek immediate medical attention. Falciparum malaria can be a

life-threatening illness. The diagnosis can only be made if a careful travel history is taken, and testing done early, even for regions where malaria is not normally recognised.

References

1. TropNetEurop Friends & Observers Sentinel Surveillance Report: November 2006. Map on p. 3. Available at: http://www.tropnet.net/reports_friends/pdf_reports_friends/nov06_dengue2006_friends.pdf
2. Rainfall maps, India Meteorological Department. <http://www.imd.ernet.in/section/hydro/dynamic/seasonal-rainfall.htm>
3. Jelinek T, Behrens R, Bisoffi Z, Bjorkmann A, Andersen P, Blaxhult A, et al. Recent cases of falciparum malaria imported to Europe from Goa, India, December 2006-January 2007. *Euro Surveill* 2007;12(1):E070111.1. Available from: <http://www.eurosurveillance.org/ew/2007/070111.asp#1>
4. Country list; Vaccination requirements and malaria situation. In: International travel and health publication. Geneva: World Health Organization; 2005. http://whqlibdoc.who.int/publications/2005/9241580364_country_list.pdf

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