

May sand fly fever be seen with Malaria as co-infection or not?

Dear Editor

At present, there are no published reports about co-infection between sand fly fever and malaria. In this letter to the editor, I would like to bring your attention to this matter. As you all know that malaria is parasite disease and can be transmitted to human in different ways. The disease is most commonly transmitted by an infected female *Anopheles* mosquito via blood sucking.^[1] There are many such *Anopheles* mosquitoes, which are infected with the parasites (*P.falciparum* *P.malariae* *P.ovale* *P.vivax* and *P.knowlesi*).^[2,3] Malaria kills thousands of people in the world, mostly, in developing countries, such as Africa and Asia.^[4] There is no vaccine available for malaria presently, and the parasite and its vector are resistance to many antimalaria drugs and insecticides respectively.^[5,6]

Therefore, Malaria remains a major health concern in many parts of the world^[7,8] [Figure 1].

Sand fly fever is a vector borne disease and it is endemic in many parts of the world, particularly, in west Asia and Europe.^[9] Little is known about sand fly fever in many parts of world may be due to lack of seroepidemiological studies.^[10] The disease could be transmitted from animals or infected patients to humans mostly via blood sucking by a small mosquito called sand fly.^[11] There are different species of sand flies, but only the *P.papatasi* female has a main role in transferring the virus.^[12] The virus belongs to the Bunyaviridae family and so far various stereotypes of virus have been introduced. Among viruses mentioned

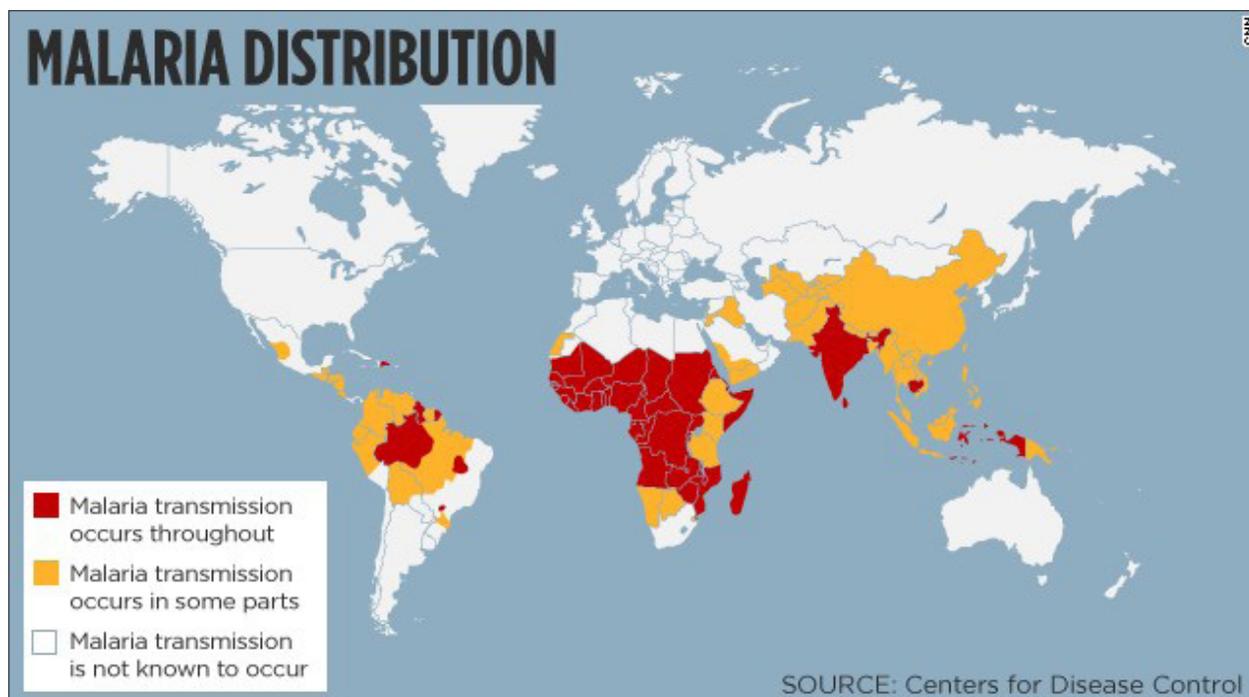


Figure 1: Malaria map in the world.

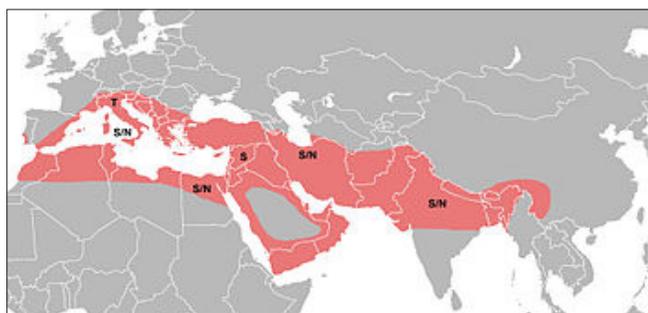


Figure 2: Distribution of pappataci fever by serotype: T, Toscana, S, Sicilian; N, Naples.

earlier, Sicilian, Naples, Toscana, are very common depending on the geographical distribution^[13] [Figure 2]. In addition, little is known about sand fly fever in the areas infected with both malaria and leishmaniasis diseases.^[14,15] The disease has no vaccine or a specific cure at present. Both diseases have fever as main symptom of the disease. Accrued clinical and Para-clinical tests are required to differentiate the disease. I believe that the co-infection of Sand fly fever with Malaria is also possible. We need more care for patients who may be infected with both diseases at the same time with similar fever but different in origin.

The question could be answered in order to find out the fact in the future.

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Conflicts of interest

There are no conflicts of interest.

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