Position Statement

Chikungunya Virus

March 2017

Approved by: Standing Advisory Committee on Transfusion Transmitted Infections

Background

Chikungunya was first described in Tanzania in 1952. The name is derived from a local Tanzanian word meaning 'that which bends up', a reference to the stooped posture many patients develop as a result of painful inflammation of the joints commonly associated with the disease.

Chikungunya is a self-limiting febrile illness caused by an alpha virus spread by the same day-biting mosquito as dengue (usually of the Aedes species). It is characterized by arthralgia or arthritis typically in the knee, ankle and small joints of the extremities, which may be persistent, high fever, followed by a maculopapular rash. Buccal and palatal lesions can occur as may nausea and vomiting. Thrombocytopenia may be present leading to bleeding, especially in children. Rarely there may be fulminant liver failure and death. It is known from antibody studies that many infections are asymptomatic. Immunity is long lasting. The virus is known to infect humans, primates, other mammals and birds. There is no evidence of person-to-person transmission except through blood transfer. At present the only treatment available is symptomatic. No vaccine is available.

Although it is possible that chikungunya could be transmitted by transfusion, or by tissue or organ transplantation, the Standing Advisory Committee on Transfusion Transmitted Infections is not aware of any proven instance of transmission by these routes.

Until recently chikungunya had usually occurred in Africa and South and East Asia, but affected areas have been increasing in recent years. In late 2004, large outbreaks of chikungunya fever in the Indian Ocean raised serious public health concerns. The first recognised outbreak in Europe occurred in the northeast of Italy in the summer of 2007. The vector mosquito has become widespread following importation through international trade. It was first noted in Albania in 1979 and by 2007 has been found as far north as Belgium. In September 2010 there were the first reported cases of indigenous infection in France: two 12 year old schoolchildren resident in the south of France. A further small outbreak of 12 cases occurred in France in 2014.

In December 2013 many islands in the Caribbean started reporting confirmed cases of chikungunya, with cases also being been reported for the first time in French Guiana. Beginning in 2014, chikungunya virus disease cases were reported among U.S. travellers returning from affected areas in the Americas and local transmission was identified in Florida, Puerto Rico, and the U.S. Virgin Islands; surveillance for chikungunya infections has been enhanced in the region and continues. Since then only one locally acquired case, in Texas in 2015, has been identified in continental USA. Chikungunya is now established in Central and South America and the islands of the Caribbean.

Indigenous infection does not occur in the United Kingdom, but a number of cases are reported each year in travellers returning from endemic areas which until recently were mostly acquired in the Indian sub-continent and South East Asia. However of the 295 case of chikungunya reported in England, Wales and Northern Ireland in 2014, 80% had been acquired in the Caribbean. Case numbers for 2015 and 2016 have not yet been published.

Information about international outbreaks of chikungunya is available on the National Travel

Joint UKBTS Professional Advisory Committee (1)

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Health Network and Centre (NaTHNaC) website: NaTHNaC website.

Visitors to some chikungunya affected areas will be excluded from donation for six months under current malaria guidelines. However, most of the newly affected areas are not covered by malaria exclusions. Visitors to chikungunya affected areas should not donate blood or tissues for four weeks from their return to the UK if they have had no symptoms suggesting that they may have been infected with chikungunya or for six months from their return if they have been diagnosed with chikungunya or had symptoms which may be suggestive of chikungunya infection.

Countries affected by chikungunya and any applicable time limits are shown in the Geographical Disease Risk Index (GDRI) and any associated Change Notifications.

(¹) Joint United Kingdom Blood Transfusion Services Professional Advisory Committee