

Occurrence of Guillain-Barré syndrome in patients affected by dengue, zika and chikungunya - a literature review

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Introduction

- Guillain-Barré syndrome (GBS) is an autoimmune disease that develops with demyelination and / or degeneration of axons in the peripheral nervous system, and may manifest as a secondary condition to several viral infections.
- Epidemiological studies have correlated urban arboviruses to GBS, which manifests itself within a few days after the classic clinical manifestations of these viruses.

Metodology

- Search for articles published between the years 2004 to 2017 in the Medline and Lilacs databases.
- The descriptors used, individually and in combination, were: *arboviruses*, *zika virus*, *chikungunya fever*, *dengue*, *Guillain-Barre Syndrome*.
- Were included articles describing the occurrence of GBS in patients with one of three arboviruses published in English, Portuguese and Spanish. We selected and analyzed 17 articles.



Source: <https://fernandomaiainfecologista.wordpress.com/tag/arboviroses/>

Results

- Zika is the infection with the highest prevalence of GBS and dengue with a lower prevalence.
- Although encephalitis presents as a more frequent neurological complication in chikungunya and dengue, GBS surpasses encephalitis when the three arboviruses are added.

Conclusions

It is concluded that arboviruses, especially zika, may lead to late neurological manifestations of their classic symptoms, among which, in adults, the most common is Guillain-Barré syndrome.

[1]J. Pinheiro et al., Arq Neuropsiquiatr 74 (2016) 937-943

[2]S. Bolan et al., Porto Alegre 51 (2007) 58-61

[3] C.N. Soares et al., Journal of the Neurological Sciences 249 (2006) 19-24

[4]S. do Rosário et al., The American Journal of Tropical Medicine and Hygiene 95 (2016) 1157 – 1160

[5]H. Solomon et al., J Neuroinfect Dis. 7 (2016) 2314-7326