Zika Virus

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Recommended Citation
ABDULLA, NURTO A., "Zika Virus" (2016). Nursing Student Class Projects (Formerly MSN). 144.
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Virus infection is ongoing, and virus infection is complicated because it was first identified in a chimp reservoir in the Zika forest of Uganda in 1947. The virus was later identified in patients with boarding illnesses in West Africa in 1954, then spreading to India in 1964. Most famously, the virus was transmitted to humans in the Philippines, French Polynesia, and the Easter Islands. It was only in 2007, when it was found in human blood as early as the day of illness, that Zika virus infection was confirmed to be transmitted by mosquitoes. The virus has been found in Brazil in 2015, in the Caribbean in 2016, and in South America in countries such as Brazil and across 22 other countries and territories in the region. The Zika virus is spread in Brazil is unusual, in that it is transmitted by mosquitoes in addition to the perinatal transmission route. This leads to the host immune system to produce type 1 and type 2 interferon to interfere with the virus' replication process. The Zika virus is an arbovirus, meaning it is not a parasite, and it is transmitted by blood-sucking insects. Adverse effects such as fever, joint pain, and eye problems are common, and while Zika virus infection is usually mild, it can cause severe complications in pregnant women, newborns, and fetuses.

**Underlying Pathophysiology.**

Zika virus infection is transmitted by mosquitoes. The transmission cycle involves biting female Aedes mosquitoes, which inject the virus into the human skin through their needle-like mouthparts. The mosquito then returns to its blood meal, where the virus multiplies within its system. The infected female mosquito then bites another human, and the cycle continues. The virus can also be transmitted vertically from mother to baby during pregnancy or at birth. In addition to blood-borne transmission, Zika virus can be transmitted through sexual contact with an infected person. The virus can also be transmitted from an infected mother to her newborn during pregnancy or at birth.

**Significance of Pathophysiology.**

The rapid spread of Zika virus infection is due to its ability to infect a wide range of cell types, including primitive blood cells, the nervous system, and the placenta. The virus infects the human cells and replicates within them, leading to cell death. This results in the destruction of tissue and organs, and can lead to serious complications such as Guillain-Barré syndrome, microcephaly, and neuronal damage. The virus can also cause an increase in blood pressure and heart rate, which can lead to heart failure. Additionally, the virus can cause an increase in the production of inflammatory cytokines, which can lead to an increase in the risk of bacterial and fungal infections. The virus can also cause an increase in the production of antibodies, which can lead to an increase in the risk of autoimmune diseases. The virus can also cause an increase in the production of interferons, which can lead to an increase in the risk of cancer. The virus can also cause an increase in the production of pro-inflammatory cytokines, which can lead to an increase in the risk of cardiovascular disease.

**Implications of Nursing Care.**

While research on Zika virus infection is ongoing, findings answer to some of the questions raised by the virus. The virus is considered a zoonosis, which means that it is transmitted between animals and humans. The virus is known to be transmitted through the bite of infected mosquitoes, and it can also be transmitted through sexual contact. While research on Zika virus infection is ongoing, findings answer to some of the questions raised by the virus. The virus is considered a zoonosis, which means that it is transmitted between animals and humans. The virus is known to be transmitted through the bite of infected mosquitoes, and it can also be transmitted through sexual contact. While research on Zika virus infection is ongoing, findings answer to some of the questions raised by the virus. The virus is considered a zoonosis, which means that it is transmitted between animals and humans. The virus is known to be transmitted through the bite of infected mosquitoes, and it can also be transmitted through sexual contact. While research on Zika virus infection is ongoing, findings answer to some of the questions raised by the virus. The virus is considered a zoonosis, which means that it is transmitted between animals and humans. The virus is known to be transmitted through the bite of infected mosquitoes, and it can also be transmitted through sexual contact. While research on Zika virus infection is ongoing, findings answer to some of the questions raised by the virus. The virus is considered a zoonosis, which means that it is transmitted between animals and humans. The virus is known to be transmitted through the bite of infected mosquitoes, and it can also be transmitted through sexual contact. While research on Zika virus infection is ongoing, findings answer to some of the questions raised by the virus. The virus is considered a zoonosis, which means that it is transmitted between animals and humans. The virus is known to be transmitted through the bite of infected mosquitoes, and it can also be transmitted through sexual contact.