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ZIKA VIRUS-WHAT WE KNOW

ZIKA virus infection is a viral illness caused by an arthropod-borne Flavivirus. It is related to other Flaviviruses like Dengue, Yellow Fever, Chikungunya, West Nile and Japanese Encephalitis virus. It is newly emerging in the Western Hemisphere with ongoing outbreak in the Americas, Caribbean and the Pacific.

ZIKA virus was first isolated in a rhesus monkey at the Zika forest-Uganda in 1947. Human cases were described in 1952 in Uganda and Tanzania. From these places it spread across Equatorial Africa and Southeast Asia. The first recognized outbreak occurred in Micronesia in 2007 (70% of the population were infected-5,000 cases of a population of 6,500). Then a large outbreak occurred in French Polynesia in 2013 (two thirds of the population affected with- 32,000 cases). The first case in the Western Hemisphere was described in February of 2014 on Chile's Easter Island. It was found in Brazil in May of 2015 and in December of 2015 was detected in Puerto Rico. As of June 2016 countries with autochthonous (mosquito-borne) infectious include most of South and Central America, Caribbean, Mexico,

Puerto Rico and the Pacific Islands. MOSQUITO BORNE TRANSMISSION OF ZIKA VIRUS INFECTION HAS NOT YET BEEN REPORTED IN THE CONTINENTAL USA. The first case of ZIKA- related congenital microcephaly in the USA was reported in January/2016 in Hawaii and the mother of the baby had resided in Brazil during her pregnancy. Sexually transmitted ZIKA virus infection was reported in Texas in February/2016 and since several other cases of sexually transmitted infection has been reported by the CDC. There are 1,133 individuals within the continental United States who are infected with ZIKA, and more than 2,000 in US territories where there is active ZIKA transmission.

Transmission of the ZIKA virus may occur through bite of an infected mosquito, maternal-fetal, Sex, (both male to female and female to male), blood transfusion, organ transplant and laboratory exposure. However, transmission occurs primarily through Aedes aegypti mosquito bites in tropical regions and Aedes albopictus in temperate regions. Aedes mosquitos bites during daytime and they breed in clear standing water. ZIKA virus infection is an urban disease, usually seen in crowd, poor communities.

ZIKA virus RNA has been detected in blood, semen, urine, saliva, CSF, amniotic fluid and breast milk. The virus is detected in the

BLOOD from 3-7 days post infection by rt-PCR. Pregnant women may be viremic longer and up to 10 weeks after symptom onset. In the URINE, the virus may be detected for at least 2 weeks after symptoms begin. In the SEMEN, virus may be detected up to 62 days after onset of febrile illness. Semen viral load may be high. In one report the viral load in the semen post 2 weeks of symptoms was roughly 100,000 times that of the blood or urine.

The incubation period is usually 2-12 days post exposure. Only 20-25% of infected people are symptomatic. If symptoms do occur, they are mild and with low grade fevers, maculopapular pruritic rash, arthralgias, conjunctivitis, myalgias and retro-orbital pain. Perinatal complications is the most worrisome event related to ZIKA virus infection and exact incidence of these is not yet well known. ZIKA virus infection in all trimesters has been associated with fetal abnormalities, but greatest risk of severe fetal sequelae is in the first trimester.

-Continued on page 2 -

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Upcoming Events



August 19,
Summer Social

September 20,
NKMS Executive
Board Meeting

October 6,
Meet Your
Legislators Dinner

ZIKA VIRUS-WHAT WE KNOW

-Continued from page 1-

Fetal neurological complications reported thus far includes: microcephaly (20-fold increase in Brazil from March 2015- March 2016), fetal losses, widespread brain calcifications, ventricular enlargement, optic nerve abnormality, macular atrophy and hydranencephaly. Another feared complication of ZIKA virus infection is Guillain-Barré syndrome and its incidence is 2.4 cases per 10,000 ZIKA virus infections. The diagnosis of ZIKA infection should be suspected in patients with typical presentation and relevant epidemiological exposure as well as in individuals with unprotected sexual contact with a person that meets these criteria. The diagnosis is established by rt-PCR (positive only for a brief period in the blood) or ZIKA serology (positive after 4 or more days

post onset of symptoms). The rt-PCR is positive only early in the disease, prior to symptoms and up to 7 days of illness in the blood and up to 14 days in the urine. The serologies tests are the MAC-ELISA test (IgM) and PRNT (IgG-plaque reducing neutralizing test).

There is currently no vaccine or specific treatment for infection with ZIKA. Preventive measures should be the mainstay of avoiding infection. These include mosquito repellent, eliminating and controlling mosquito breeding sites, protective intercourse, no blood or tissue donation for six months post returning from endemic regions. Pregnant women should not travel to areas where ZIKA virus is circulating. No travel restriction in areas > 6500 ft or 2000m. Men with ZIKA exposure and who has a pregnant partner should abstain from unprotected sex for the duration of pregnancy. Men with symptomatic ZIKA infection should wait at least six

months before having unprotected sex. An asymptomatic men with ZIKA exposure should wait at least eight weeks before unprotected sex.

The Olympics is taking place in Rio de Janeiro from August 5th to the 21st. CDC estimates that Brazil comprise only 0.25% of all travel affected areas and if preventive measures above in place, the fact that it is winter in Rio and less mosquitos around, risks low and therefore Olympics should not be cancelled.

Dora Savani, MD

Update

Summer Social—

Friday, August 19, 2016

6:00 PM - 9:00 PM

Hofbrauhaus Newport (200 E 3rd Street Newport, Kentucky).

Open Bar 6:00 PM-8:00 PM

Dinner Buffet 6:00 PM-9:00 PM

This event is complimentary for NKMS physician members and their guest.

Please RSVP to Karla Kennedy at (859) 496-6567 or via email to nkms@nkms.org by August 12, 2016.

Sponsored by the NKMS

Meet Your Legislators Dinner-

Thursday, October 6, 2016

Summit Hills Country Club (236 Dudley Road, Crestview Hills, Kentucky).

Cocktails (cash bar) - 6:30 PM

Dinner - 7:00 PM

Presentation/Introduction of Legislators - 7:45 PM

Dinner is complimentary for NKMS physician members and their guest.

Please RSVP to Karla Kennedy, at (859) 496-6567 or via email to nkms@nkms.org.

Sponsored by the NKMS

We want to welcome the new first year residents in the St. Elizabeth Healthcare Family Practice Program.

We wish them all success and I'm sure all members of the Medial Society join in welcoming them into the Northern Kentucky community.

Danielle Blazewick, MD

Stephen Coppel, MD

Kristo Curi, MD

Ravinderjit Hans, MD

Jamie Kmety, MD

Melissa Larson, MD

James Schack, MD

Jodi Wilder, DO

NKMS Alliance Report

Kentucky was well represented at the most recent AMA meeting in June. Our own, Kim Moser (Neal Moser, MD) was installed as President-Elect of the AMA Alliance. We are so proud of Kim. She will be installed as President of the AMA Alliance in June of 2017. I don't know if NKYMSA has had a President of the AMA Alliance before.



Kim Moser, AMAA PE, Julie Newman, AMAA Out going Pres, Rosemary Xavier, AMAA Incoming President, Sarah Sander, AMAA Immediate Past President



Nancy Swikert, MD, President, NKMS Alliance

KMA Alliance, Patty Pellegrini (Lex) is busy planning the annual KMA Alliance leadership meeting for Sept 9-11, 2016 at Marriott East Louisville. Mark your calendar now for that date to be there.

KMA Annual Meeting

The 2016 KMA Annual Meeting is scheduled in Louisville September 9-11, 2016 at the Louisville Marriott East.

The NKMS is looking for members to serve as Delegates to the KMA. There are several positions that need to be filled. Below is a synopsis of the KMA Annual Meeting.

On Friday, September 9-The NKMS will provide dinner for our delegates and their spouses at the Brasserie Provence (150 N. Hurstbourne Pkwy, Louisville, KY) at 7:00 PM.

On Saturday, September 10-The Reference Committee will meet from 8:00 AM-10:00 AM. (We need 1-2 people to serve on the Reference Committee).

On Saturday, September 10-The Leader-

ship Reception starts at 4:30 PM. The Kentucky Medical Association Leadership Dinner (formerly known as the President's Dinner) will follow at 7:00 PM. At this event, they will inaugurate the KMA and KMA Alliance Presidents, honor this year's Community Connector participants, and recognize the winners of the Distinguished Service Award and the Debra K. Best KMA Outstanding Layperson Award. Dr. Nancy Swikert will be installed as the 2016-2017 KMA President. The NKMS will reserve tables and purchase dinner tickets for our delegates and their spouses for the KMA Leadership Dinner.

On Sunday, September 11-breakfast will be served for our delegates from 10:00 AM-Noon. Following breakfast, our delegation will attend the House of Delegates Meeting at 12:30 PM. (We need Tellers

to tally ballots during the Sunday meeting of the House of Delegates). **(Credentials** - Need 1 or more for the House of Delegates meeting).

If you are able to serve in any capacity, please contact the NKMS office at 859-496-6567 or via email to nkms@nkms.org. Thank you for your consideration.

For additional information regarding the annual meeting, please visit KMA's website www.kyma.org, click on Annual Meeting.



Northern Kentucky
Medical Society

P.O. Box 18255
Erlanger, Kentucky 41018

Contact Information

Phone: (859) 496-NKMS
(6567)

E-mail: nkms@nkms.org

Northern Kentucky's
Physician Network

Address Correction Requested

President's Report

Currently the in-state tuition for medical schools runs roughly \$30,000 per year. This leaves many students with a debt of over \$100,000 for medical school alone. Throw in undergraduate tuition and that debt easily approaches over \$200,000. A \$200,000 debt before one receives their first pay check as an intern is a daunting task. Dr. Ted Miller, NKMS member and KMA president has rightly described this debt as more than just a burden. It leads to a type of indentured servitude. Saddled with such a financial weight around his or her neck a young doctor may make a career choice based on how to break free the chains of financial servitude. We work to pay off a debt not for ourselves. Many of us know this all too well. How would our lives and the lives of our families be different if we did not have such a financial responsibility? It determines where we live, what career path we take and who we work for.

While policy makers struggle with how to fix this problem, tuition continues to increase. The problem grows. However, we as a community of physicians can do something about it. Currently, through the NKMS Foundation, we offer a two-year scholarship to medical students at the University of Kentucky. We need to expand this program. I propose that we now offer the same two-year scholarship to medical students at the University of Louisville. While others talk about the problem we can act. I challenge the physicians of Northern Kentucky to help free the doctors of tomorrow from financial debt. There is nothing stopping us in the future from helping medical students who attend the University of Cincinnati or Pikeville. After all, these are our alma maters. I would ask all of you to consider donating to the NKMS Foundation. You can be assured it will have an impact on a young person's life. Such a donation will benefit our community and strengthen our profession.

On a different topic, I would like to invite you and your spouses to dinner on Friday, September 9. This is the weekend of the KMA Annual Meeting in Louisville. The dinner will be at Brasserie Provence restaurant at 7:00 p.m. Please contact the NKMS office at 859-496-6567 or via email to nkms@nkms.org to make a reservation. I hope to see you there.

Mark Schroer, MD, President, NKMS