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Enterovirus: What Everyone Should Know

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Enterovirus: What Everyone Should Know
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Introduction

Enterovirus is capturing the attention of many individuals today. Exactly what is it, who is affected by it, and can it be treated and/or prevented? Like any virus the enterovirus has many different strains. The strain capturing everyone’s attention lately is human enterovirus 68 (HEV68). This strain was first detected in California in 2012 (Osterholm et al., 2004). Most cases of HEV68 are mild and do not require medical attention; however some can become severe and may cause serious heart or brain infections according to the Center for Disease Control and Prevention (CDC) website (Updated September 8, 2014). HEV68 is a respiratory illness that can mimic the human rhinoviruses with symptoms such as fever, runny nose, sneezing, and coughing (CIC, 2014). Most people who become infected with the enterovirus do not require treatment as it is a self-limiting illness, but for others treatment in a hospital setting is necessary (Rothbart & Webster, 2011). Rarer is the illness fatal, though there have been some deaths attributed to the virus (Imamura et al., 2013).

What is Enterovirus?

According to Rothbart and Webster there are about 70 varieties of enterovirus, not just what it is, who is affected by it, and can it be treated and/or prevented? Like any virus the enterovirus has many different strains. The strain capturing everyone’s attention lately is human enterovirus 68 (HEV68). This strain was first detected in California in 2012 (Osterholm et al., 2004). Most cases of HEV68 are mild and do not require medical attention; however some can become severe and may cause serious heart or brain infections according to the Center for Disease Control and Prevention (CDC) website (Updated September 8, 2014). HEV68 is a respiratory illness that can mimic the human rhinoviruses with symptoms such as fever, runny nose, sneezing, and coughing (CIC, 2014). Most people who become infected with the enterovirus do not require treatment as it is a self-limiting illness, but for others treatment in a hospital setting is necessary (Rothbart & Webster, 2011). Rarer is the illness fatal, though there have been some deaths attributed to the virus (Imamura et al., 2013).

How is it Spread?

HEV68 enters a host through the oropharynx where it then replicates in submucosal tissues. It can optimally grow at body temperatures but has not been approved by the Food & Drug Administration. Since there is no treatment available for HEV68, nor are there any vaccinations for enterovirus 68 infection (http://www.cdc.gov/non-polio-enterovirus/HEV68.html). With bronchiolitis and pneumonia, and does not require medical attention, but has not been approved by the Food & Drug Administration. To date there are no approved medical treatments for enterovirus (De Palma et al., 2007).

Prevention

While hand washing is a great way to prevent the transmission of disease, enterovirus can attack anyone, but it is more common in infants, children, and those with a compromised immune system. The most at risk are newborns and children with asthma due to an immature or compromised immune system, but there does not appear to be an increased risk of infection in one gender versus the other. The virus is transmitted by contact with a person or object that has the virus, (CDC, 2014). The CDC also reports an increase of infection in one gender versus the other. The virus is transmitted by contact with a person or object that has the virus, (CDC, 2014). The CDC also reports an increase of infection in one gender versus the other. The virus is transmitted by contact with a person or object that has the virus, (CDC, 2014).

Treatment

There are currently no vaccinations available to prevent becoming infected with HEV68, nor are there any medical treatments or procedures to treat those who are already infected with HEV68. Treatment is focused on supportive care until the patient recovers. Pleconaril has been studied in the treatment of life-threatening enterovirus infections, (Rothbart & Webster, 2001) but has not been approved by the Food & Drug Administration. There are currently no vaccinations for enterovirus 68 like illness in states. Retrieved from http://www.cdc.gov/non-polio-enterovirus/HEV68.html.

Conclusion

Enterovirus has been all over the news recently, though it is not a new virus. HEV68 was first detected in 1962 in four children who were hospitalized with bronchiolitis and pneumonia, (Imamura et al., 2013) The virus is mostly responsible for causing mild illness in most people such as fever, runny nose, sneezing, and coughing (CIC, 2014), while others may present with more serious symptoms which require hospital care. Treatment is typically run from late summer through late fall. Since there is no treatment available for HEV68, nor are there any vacines for enterovirus 68 infection, the best course of action is to use good preventative measures. The simplest actions can be the most effective, such as a healthy lifestyle, using good hand washing techniques, and staying home if sick. Retrieved from http://www.cdc.gov/non-polio-enterovirus/HEV68.html.

References Cited


Additional Resources


Enterovirus. Retrieved from: http://www.immunityandinfection.com/enterovirus-68-


Additional Resources


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