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Submission date: 29-Mar-2021 09:48PM (UTC+0700)

Submission ID: 1545464876

File name: Rift_Valley_Fever_In_Saudi_Arabia121Q.edited12.docx (21.12K)

Word count: 1290

Character count: 6702

Rift Valley Fever In Saudi Arabia

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Rift Valley Fever In Saudi Arabia

Rift valley fever typically affects humans and animals. The name rift valley fever comes from the Rift valley, which is located in East Africa. This disease is caused by a virus that was discovered in East Africa. In 1930. Those patients who suffer from the disease show symptoms like fever, abdominal pain, vomiting, diarrhoea, and liver failure in human beings (Wright et al.019). The disease also affects sheep and cattle. Other symptoms of the disease are disseminated intravascular coagulation and renal failure.

Rift valley fever is a transmittable disease that is caused by the rift Valley virus. The disease has devastating effects on both humans and livestock. The primary method of transmission of the disease is through the air. In other words, the disease can be categorized as an air-borne disease. This is because the virus can penetrate the body of an animal or human through the air. The virus is transmitted through breathing the air from a place where an animal has been butchered.

Additionally, the disease can be transmitted when one touches infected animal blood (Hartman, 2017). Drinking raw milk from an infected animal is another way of transmitting the disease. The Rift valley fever virus majorly affects animals; if human beings consume raw milk from an infected animal, the virus infects the human body. It is essential to avoid taking raw milk to avoid transmitting the rift valley virus from the livestock. Lastly, the virus can also be transmitted through a bite from an infected mosquito. When a human being gets a bite from an infected mosquito, the rift valley virus is transmitted from the mosquito's saliva to the human blood. The rift valley virus is a type of virus called Phlebovirus.

The diagnosis of the disease is challenging in the first days of infection because it is hard to trace the disease's actual symptoms in the early stages of infection. However, the use of laboratory diagnosis is an efficient method of diagnosis. The laboratory method of

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diagnosis involves running laboratory tests on the victims' blood samples or testing some victims' tissues. Testing the blood samples is done on the patients, while a post-mortem is done on the dead animal or human tissues. Testing the antibody of patients is another effective way of identifying the virus's presence in the human body. This process is very effective because the testing is linked to the enzyme Immunoassay, which shows IgG antibodies' presence.

In Saudi Arabia, the disease is prevalent in rural areas where people can spend their night outside where there are many mosquito attacks and other insects that bite humans. Similarly, those who work in butcher houses exposed to touching raw meat stand a greater chance of getting infected by the virus. Therefore, some people who work in slaughterhouses and the herdsmen have a higher chance of getting infected. Similarly, international travellers who visit Saudi Arabia have a higher chance of transmitting the disease. In conclusion, those who get in touch with the livestock stand a greater chance of getting infected.

In Saudi Arabia, the Rift valley fever infections were reported in the year 2000 were 886 cases of the disease were recorded. This was one of the highest cases of infection in the country. Of 886 patients, 81% of the patients were confirmed through laboratory tests (Kenawy, Abdel-Hamid & Beier, 2018). Of the 81% of the patients who underwent a laboratory test for the disease, 51.1% were positive, meaning the rift valley virus had infected them. 35% of people had the rift valet virus antigen while 13.2% of patients were positive, whereby they contained both the virus and the antigen.

From the sample of 886 patients collected, the standard deviation of the age of the sample was ± 19.4 years, while the average age of the patients was 46.9 years. On the other hand, the ratio of the infected persons from the sample, between men and women, was 4:1, which means more infections in men than in women (Samy, Peterson & Hall, 2017).

According to the symptoms, the patient's samples' analysis shows that 92% of the patients experienced high fever, 59.2% patients experienced nausea, 52.6% vomited, 38.0% had severe abdominal pain, 22% diarrhoea, jaundice 18.1% among other severe symptoms of the disease.

The mortality rate in Saudi Arabia was about 13.9%. The patients who experienced symptoms such as neurological symptoms, bleeding, and Jaundice had a higher mortality rate than other patients with other symptoms like nausea. However, those patients who experienced leukopenia symptoms had a low mortality rate than the patients who had an average of a large number of leukocytes. Statistically, the mortality rate between those patients with leukopenia and normal leukocyte was 2.3% to 27.9%, respectively.

There was a high infection rate in areas such as Jizan, Asir, and al Qunfunda. The high rate of infection in this area was due to hot temperatures in the area, and its nearness to the red sea contributes to the breeding of mosquitos. Additionally, the area's economic activity, which is mainly farming, contributes to the spread of the virus as the farmers practice livestock farming (Linthicum, Britch, & Anyamba, 2016). The hot environmental condition of the area forces men to sleep outside their houses at night hence getting high chances of getting infected, and that explains why there is a high rate of infection of the disease in men than in women.

The remoteness of these regions also plays a significant part in allowing the spread of the disease. The majority of the people lining these areas are poor; hence they have poor housing structures. Therefore, the houses do not prevent mosquitoes and other insects that can transmit the disease to the area from entering their houses. This contributes to the high rate of rift valley fever infection in the area compared to other areas.

From the above statistics, the government of Saudi Arabia should measure to control the spread of the disease. For example, the government can vaccinate people living in high-

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risk areas such as Jizan and Asir. Additionally, the government should give the farmers living in these remote funds areas to build good houses and provide mosquito nets to prevent transmission of the virus from the mosquitos and other insects. Finally, hygiene maintenance in the slaughterhouse and inspection of the slaughterhouse's livestock should be encouraged to reduce the infection from breathing air in the infected animals.

Conclusion

² Rift valley fever is a disease that is caused by the Rift valley virus. The disease is commonly transmitted from animals to human beings either through air, blood, and touching an infected animal. In Saudi Arabia, the disease has declared a pandemic in 2003, where many cases were recorded. The most infected areas in Saudi Arabia include Jizan and Asir; this is because of the high temperatures that facilitate mosquitoes' breeding and, hence, increase the transmission rate. Administering vaccines to people is one of the best ways to reduce and control the pandemic.

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