

Immune Response 2019: Peste des petits ruminants - Meta-analysis of the virus isolation in molecular epidemiology studies and Several Viral Diseases - Samuel E. Mantip - National Veterinary Research Institute

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Abstract

Peste des petits ruminant (PPR) is a highly contagious, infectious viral disease of small ruminants' species which is caused by the peste des petits ruminants virus (PPRV), the prototype member of the Morbillivirus genus in the Paramyxoviridae family. Peste des petits ruminant was first described in West Africa, where it has probably been endemic in sheep and goats since the emergence of the rinderpest pandemic and was always misdiagnosed with rinderpest in sheep and goats. Since its discovery PPR has had a major impact on sheep and goats breeders in Africa and has therefore been a key focus of research at the veterinary research institutes and university faculties of veterinary medicine in Africa. Several key discoveries were made at these institutions, including the isolation and propagation of African PPR virus isolates, notable amongst which was the Nigerian PPRV 75/1 that was used in the scientific study in understanding the taxonomy, molecular dynamics, and lineage differentiation of PPRV and the development of vaccine seeds for immunisation against PPR. African sheep and goat breeds including camels and wild ruminants are frequently infected, manifesting clinical signs of the disease, whereas cattle and pigs are asymptomatic but can seroconvert for PPR. The immunisation of susceptible sheep and goats remains the most effective and practical control measure against PPR.

The most common neuro immune disorder is multiple sclerosis and hiv is the most common viral infection of the nervous system. The diseases caused by germs and which may infect any part of the body are called infectious diseases. They can be spread by any means where there is a germ. They are caused by pathogenic microorganisms such as bacteria, virus, parasites and fungi. Germs can be spread by direct or indirect contact. Vaccination, maintenance of proper hygiene and medicines help in the prevention of infection.

Neuro infectious diseases are the infectious diseases which are observed in the nervous system. Viral and immune mediated disorders of the nervous system are among the most challenging neurological disorders.

Bacterial & Fungal Infectious Diseases:

Contamination is the impact of a foreign organism in the frame. These infectious organisms are known as pathogens. Examples of pathogens encompass bacteria, viruses, fungi, and prions. Varieties of contamination encompass bacterial, fungal, viral, protozoan, parasitic, and prion disease. Skin is a barrier this is supposed to defend you from bacteria, but microorganism can typically be observed dwelling at the pores and skin of wholesome individuals. Globally, about one-third of human deaths are attributable to infections. In addition, the so-called non-infectious causes of death often have a mysterious infectious etiology. Many rare diseases or orphan diseases caused by infectious agents rather than genetic or environmental factors. A spoil inside the pores and skin can exchange this scenario from an innocent one to one wherein the character can turn out to be ill.

Rare cancer syndromes typically produce various types of cancers, including rare cancers and common cancers. Rare cancers tend to be caused by simple genetic mutations, and common cancers tend to be caused by a complex set of genetic and epigenetic aberrations that continually increase in number as the tumor develops. All cancers that can be cured when in an advanced clinical stage are rare cancers. Aging is a collection of degenerative changes that occur in organisms that lack the ability to perpetually regenerate. Age is a major risk factor for most common neurodegenerative diseases. Rare diseases provide much insight into the cellular processes that hasten the aging process. Dementia becomes more common with age. The spectrum includes mild cognitive impairment, Alzheimer's disease,

cerebrovascular disease, Parkinson's disease and Lou Gehrig's disease.

Ebola and Zika Viral Infections:

Ebola primary symptoms include fever, sore throat, muscular pain and headaches then followed by vomiting, diarrhoea, rash, decreased function of the liver and kidneys then loss of blood internally and externally finally leading to low blood pressure and fluid loss resulting in death. Ebola viral infection is caused by virus transmitted through body fluids and through air. It occurs rarely but it is very deadly which results in death and outbreak. Ebola virus disease symptoms are very severe which appears in 2-3 days. Zika virus disease is caused by a virus transmitted primarily by mosquitoes. People with zika virus disease can have symptoms including mild fever, skin rash, conjunctivitis, muscle and joint pain and malaise or headache.

Infectious Diseases Prevention, Control and Cure:

Disinfection is the process of killing harmful microorganisms. Some infectious diseases can be prevented by avoiding direct contact with the contagious person. Infectious diseases prevention and control is helpful to prevent the transmission of infectious diseases. Aseptic technique is normally applied to prevent the infections caused by different means. Infections can also be controlled and prevented by creating public awareness on various infectious diseases and their outbreaks. Infections can be cured by various antimicrobials. Sterilization is another process of killing microorganisms by the application of heat.

Result:

It is never too early to consider participation whether or not someone ultimately chooses to join a study. Clinical research is a branch of healthcare science. The first step in tackling this challenge is regularly getting the public to think about participating in clinical research. People need to consider how they can help advance the prevention, diagnosis, and treatment of disease.

To carry out PPR vaccination in tropical African countries with a very high temperature, a thermostable vaccine using the rinderpest lyophilisation method to the attenuated Nigeria 75/1 PPR vaccine strain has been developed, which will greatly facilitate the delivery of vaccination in the control, prevention and global eradication of PPR. Apart from vaccination, other important questions that will contribute towards the control and prevention of PPR, for example, the period when a susceptible naïve animal becomes infectious when in contact with infected animal and when an infectious animal becomes contagious, need to be answered.

Global Trends in Emerging Infectious Diseases:

An Infectious disease whose occurrence has increased in the past years or threatens to increase is termed as emerging. These diseases include new infections, previously unrecognized infections and old infections reappearing due to antimicrobial resistance, public health issues and unhygienic conditions.