



Keywords:

Introduction

Neuroinfectious diseases are a group of conditions caused by various pathogens, including bacteria, viruses, fungi, and parasites, that invade the central nervous system (CNS). These diseases can lead to a wide range of neurological symptoms and complications, and their diagnosis and treatment can be challenging. The CNS is a complex and delicate system, and any infection can have significant consequences. The pathogenesis of neuroinfectious diseases is multifactorial, involving the entry of the pathogen into the CNS, its ability to evade the immune system, and the host's response to the infection. The clinical presentation of these diseases is highly variable, depending on the specific pathogen and the site of infection. Some common symptoms include headache, fever, altered mental status, and focal neurological deficits. The diagnosis of neuroinfectious diseases often requires a combination of clinical, laboratory, and imaging studies. Treatment is typically directed at the underlying pathogen, and may include antibiotics, antivirals, antifungals, and antiparasitics. In some cases, immunomodulatory therapy may be necessary to support the host's immune response. The prognosis for neuroinfectious diseases varies widely, with some conditions being highly treatable and others being fatal. Early diagnosis and treatment are crucial for improving outcomes. This review discusses the current understanding of neuroinfectious diseases, including their epidemiology, pathogenesis, clinical presentation, diagnosis, and treatment. It also highlights the challenges in the management of these conditions and the need for further research to improve patient care.

Discussion

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