

VACCINOLOGY I**CENTRAL NERVOUS SYSTEM VACCINES**

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Abstract: Vaccines preventing acute central nervous system infections are absolutely essential, because of the high mortality and morbidity associated with these infections. In many viral and bacterial infections, such as pneumococcus, Hemophilus influenzae, mumps, measles and varicella, central nervous system is involved. In this article three important vaccines such as Meningococcal vaccine, Japanese Encephalitis vaccine and Rabies vaccine are covered. Among these, rabies vaccine is also used both as pre and post exposure vaccine.

Keywords: Meningococcal vaccine, Japanese encephalitis vaccine, Antirabies vaccine.

Points to Remember

- Many bacterial or viral infections can lead to CNS infections or complications related to CNS.
- JE disease carries a high risk of mortality of around 30% and 30% to 40% of survivors suffer from long term neurological sequelae and morbidity, hence JE vaccination is essential for children and adolescents living in endemic areas.
- Because of the intense vaccination, strategies currently the incidence JE has been drastically reduced in the endemic states of India.
- Meningococcal vaccine has not been placed in the list of routine immunization. But is being used for specific purposes like travelling abroad.
- Antirabies vaccine has been used both as pre and post exposure vaccine. Site of vaccination is important and it is given in deltoid region as well as in the lateral aspect of thigh. It should never be given in the gluteal region.
- In class III exposure, rabies immunoglobulin or monoclonal antibody has to be given in addition to antirabies vaccine.
- Antirabies vaccine as ID injections required to be given only by trained personnel, in the deltoid, anterolateral thigh or suprascapular regions

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