



Study Reveals Presence of Scrub Typhus Among Encephalitis Patients

Majority of the patients admitted for treatment of **Acute Encephalitis Syndrome (AES)** have **Scrub Typhus** according to the recent study of Baba Raghav Das (BRD) Medical college, Gorakhpur.

Acute Encephalitis Syndrome

- Acute Encephalitis Syndrome (AES) is an umbrella term for all symptoms which cause **inflammatory brain diseases**. The World Health Organisation (WHO) in 2006, coined the term AES to signify a group of diseases which seem similar to one another but are difficult to differentiate in the chaotic environment of an outbreak.
- AES can be caused by a range of factors, including toxins in unripe lychee fruit, viruses, bacteria, fungi, parasites and chemical poisons. **It is not vaccine-preventable.**
- In India, **AES outbreaks in north and eastern India have been linked to children eating unripe lychee fruit on empty stomachs.** Unripe lychees contain the toxins hypoglycin A (naturally occurring amino acid) and methylenecyclopropyl-glycine (MCPG), which cause vomiting if ingested in large quantities.
- This findings has also been backed by the research conducted by **National Institute of Epidemiology.**
- The finding is important as Scrub Typhus if diagnosed earlier can be easily treated.
- As per the paper published in **Pediatric Infectious Disease Journal** in May this year revealed about the efficacy of drug **azithromycin** in treating Scrub Typhus.
- Further evidence regarding the role of scrub typhus comes from a study of **trombiculid mites** in eastern Uttar Pradesh by **Chennai's Vector Control Research Centre (VCRC)** which found that the mites carried **Orientia tsutsugumashi**, the bacterium which causes scrub typhus.
- The study also found an increase in infestation of **rodents** by trombiculid mites during August-October, a reason behind high occurrence of the disease during monsoon.

Scrub Typhus

- **Scrub Typhus** is an acute illness caused by a bacterium *Orientia Tsutsugamushi*, which is transmitted by the bite of an infected mite larva present in the soil.
- Its **symptoms** includes **fever** (often accompanied by an eschar at the bite site), **chills, severe headache, rashes and generalized lymphadenopathy.**
- Most cases of scrub typhus occur in rural areas of **Southeast Asia, Indonesia, China, Japan, India, and northern Australia.**
- Anyone living in or traveling to areas where scrub typhus is found could get infected.

