

**INDIAN COUNCIL OF MEDICAL RESEARCH  
DIVISION OF EIDEMIOLOGY & COMMUNICABLE DISEASES**

**Minutes of the interactive meeting with the IMA and IAP members of Gorakhpur to share the findings of research conducted by ICMR on causal association of *Orientia tsutsugamushi* with AES.**

**Venue, Date & Time:** Hotel Vivek, Gorakhpur on 14<sup>th</sup> July, 2017 at 8:30 PM

**List of participants:**

Shri Rajeev Rautela, District Magistrate, Gorakhpur  
Dr. Rajiv Mishra, Principal BRD Medical College, Gorakhpur  
Dr. B.B. Gupta, President Indian Medical Association, Gorakhpur Branch  
Dr. Naresh Goyal, President, Indian Academy of Paediatricians, Gorakhpur Branch  
Dr. Rathi, Ex-HoD & Prof., Deptt. of Paediatrics, BRD Medical College, Gorakhpur  
Dr. Pranesh Nigam, Ex-HoD & Prof., Deptt. of Medicine, BRD Medical College, Gorakhpur  
– Association of Physicians of India  
Dr. S. P. Rai, Ex-HoD, Deptt. of Surgery, BRD Medical College, Gorakhpur  
Dr. VNS Yadav, Ex-HoD, Deptt. of Surgery, BRD Medical College, Gorakhpur  
Dr. Mahima Mittal, HoD, Paediatrics, BRD Medical College, Gorakhpur  
Dr. Mahim Mittal, HoD, Medicine, BRD Medical College, Gorakhpur  
Dr. Kafeel Khan, Paediatrician, BRD Medical College, Gorakhpur  
&  
40-45 Private practitioners from Gorakhpur region

**ICMR & CMC, Vellore team:**

Dr. M.D. Gupte, ICMR Chair in Epidemiology  
Dr. Manoj Murhekar, Scientist G & Director-in-Charge, NIE, Chennai  
Dr. Winsley Rose, Professor, Paediatric Infectious Diseases, CMC, Vellore  
Dr. V.P. Bondre, Scientist -E & OIC, NIV Gorakhpur Field Unit  
Dr. Nivedita Gupta, Scientist E, ICMR Hqrs

Dr. B.B. Gupta, President Indian Medical Association, Gorakhpur Branch opened the meeting and extended a very warm welcome to all esteemed guests and other participants. He appraised the participants that ICMR team will be presenting the research conducted on Acute Encephalitis Syndrome since past several years.

Dr. Rajiv Mishra, Principal, BRD Medical College, Goarkhpur thanked Shri Rajeev Rautela, District Magistrate, Gorakhpur for making himself available for this meeting. He also thanked all members of IAP, IMA, API, other doctors present for the discussion as well as the ICMR team for conducting the meeting. He reiterated that AES is a major problem in

eastern UP and all efforts should be made for its prevention, control as well as timely diagnosis and treatment.

Dr. M.D. Gupte, ICMR Chair in Epidemiology said that after the 2005 epidemic of JE, in eastern UP, the Govt. of India initiated a program on JE immunization in endemic districts. The vaccine is being given since 2006, subsequent to which, the incidence of JE has declined and has now staggered between 8-10%. However, the number of AES cases still remain the same. He further went on to describe the work done by ICMR to establish a causal relationship between scrub typhus etiology and AES. He informed that detailed presentations will be made by ICMR, BRD and CMC teams to share the detailed research findings.

Dr. Gupte subsequently steered all discussions and responded to questions, on behalf of the entire research team.

Shri Rajeev Rautela, District Magistrate, Gorakhpur ensured high level of commitment of the Govt. of UP to combat the problem of AES/JE. He informed that recently Gorakhpur region has been identified as one of the three regions in the country with poorest health indicators. In view of this, the Govt. is committed to launch multiple focussed programmes to lead to an overall improvement in health of the people. These programmes would focus on combating poverty, malnutrition, increasing literacy levels, promote sanitation and cleanliness by implementing Swachh Bharat Abhiyan, ensure provision of safe drinking water to the common masses as well as women and girl child empowerment. He said that once these parameters improve, the overall health indices of the people will also get better and cases of AES/JE are likely to go down. He assured that the Govt. of UP would be receptive to new ideas and research findings which could help resolve the mystery of AES in this region.

Dr. Nivedita Gupta, Scientist E, ICMR, described the studies conducted by ICMR since 2012, to decipher the etiology of undiagnosed AES. She explained the initial work done on JE, and enteroviruses as well as the studies conducted to establish a causal association between scrub typhus and AES. She informed about the trainings conducted by the faculty of Paediatrics Deptt. of CMC, Vellore for the clinical as well as paramedical staff of BRD Medical College, Gorakhpur. On behalf of Secretary, DHR & DG, ICMR, Dr. Soumya Swaminathan, she assured full support of ICMR in overcoming the challenges in diagnosis and management of AES. She thanked the IMA, IAP and all esteemed guests for their participation in the meeting. She delineated the following objectives of the meeting:

- To share the findings of the ICMR studies conducted between 2014 till now to decipher the etiology of AES as well as determine the causal association between AES and *Orientia tsutsugamushi* infection.
- To understand the current practice being followed by the private practitioners of Gorakhpur region for treating patients of AES as well as AFI in this region and find out whether Doxycycline or Azithromycin is being used to treat such patients.

- To address and appropriately respond to the queries and concerns of the doctors in treating control the infection at initial stages which in turn will reduce morbidity and mortality due to AES.

**Following presentations were made:**

- Dr. Mahima Mittal presented the findings of AES Cell and positive drug response to i.v. Azithromycin in subgroup of AES patients with lab confirmed scrub typhus positivity.
- Dr. VP Bondre presented the detailed lab investigations conducted by him on 407 samples received from AES patients, through the AES Cell wherein a total of 244 samples (60%) were OT positive either by IgM ELISA or PCR.
- Dr. Manoj Murhekar presented the findings of AES, AFI surveillance as well as case control study conducted at Gorakhpur during 2015 & 2016.
- Dr. Winsley Rose presented an algorithm for identifying probable patients of scrub typhus based on clinical signs & symptoms and treating such patients early with Doxycycline and Azithromycin in recommended doses.

**Outcomes of the meeting:**

- The clinicians of Gorakhpur region appreciated the detailed investigations conducted by ICMR to ascertain the role of *Orientia tsutsugamushi* infection in AES and agreed that the findings were substantial to suspect a causal association.
- Clinicians agreed to initiate prescription of Doxycycline or Azithromycin in all fever cases with suspect scrub typhus infection (hepatosplenomegaly and raised serum transaminases).
- The fever treatment algorithm developed by CMC, Vellore, based on the ICMR guidelines for treatment and management of *Rickettsial* infections, was agreeable to the doctors. However, the algorithm needs to be disseminated widely through local IMA and IAP.

Meeting ended with a vote of thanks by Dr. Rathi, former HoD, Deptt. of Paediatrics, BRD Medical College, Gorakhpur.