Asian ‘Superbug’ causes trouble worldwide

Daniel Zimmermann

HONG KONG/LEIPZIG, Germany: The emergence of a bacteria-resisted genetic mutation in Asia and other countries is posing a significant threat to global health, a multinational team of researchers reports. According to their study published in the current issue of The Lancet Infectious Diseases, evidence of increased prevalence of a gene that makes bacteria resistant to antibiotics was detected in New Delhi metallo-beta-lactamase (NDM-1), which was first identified by UK Professor Tim Walsh in a hospital in India last year, has been found to be resistant in a wide range of antibiotics including penicillin and amoxicillin which are commonly used after dental procedures. In addition, it also affects the efficiency of car-bapenem -resistant Enterobacteriaceae. Mutated genes have been recently isolated, for example, in the United States, Sweden, Turkey, Israel, Greece, and the UK, he said.

Prof. Walsh told the New Scientist that due to travelling and medical tourism throughout the region, bacterial mutations like NDM-1 are becoming increasingly found their way from India, Pakistan and the UK. The researchers called for co-ordinated international surveillance of the enzyme to prevent its spread through medical and dental tourism.

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Infectious disease experts have warned clinicians be increasingly aware of the possibility of NDM-1 producing bacteria in patients who have received medical services in India and Pakistan. They are also advised to specifically inquire about this risk factor when car-bapenem -resistant Enterobacteriaceae are identified in their country.