Dec 29 2014: The Times of India (Kolkata)
Infections resistant to `last antibiotic' emerge in India

Hosps: Colistin Cannot Treat Many Cases

It is the beginning of the end. Hospitals in India are now recording cases of infections resistant to colistin, the last antibiotic available in the world. It was brought back from a 40-year exile in 2005 to treat increasing number of infections resistant to other high-end antibiotics. For now, colistin is the only cannon left in the medical armoury to treat bacterial infections, mainly those acquired in the hospital that no drug can treat. The number of such cases is rare, but worrisome, say doctors.

The first-ever evidence of pan-drug resistant cases has now been recorded by three Chennai-based doctors. Their paper: `Emergence of pan-drug resistance among gram negative bacteria! The first case series from India' has been published in the latest issue of Journal of Microbiology and Infectious Diseases.

The paper maps 13 cases recorded over 18 months and concluded that pan-drug resistant infections, particularly those in the blood stream, have a higher mortality. Tertiary-care hospitals across the country are recording cases of infections that even colistin can't treat, with the resistance detected at 4 to 5 % in Delhi hospitals, indicative of good infection control mechanism in place, said Ramanan Laxminarayan, vice president for research and policy at the Public Health Foundation of India.

In Pune's state-run Sassoon General Hospital, of the 799 drug-resistant bacteria tested between January and July in 2014, 36 were found to be colistin resistant. Stray cases have been reported at Ruby Hall Clinic in Pune and doctors at Tata Memorial Hospital in Mumbai recall one case in the last three to four years.

"Colistin resistance is still rare. It is carbapenem (the strongest class of antibiotic) resistance that is increasing across the world. Colistin is used to treat cases that are resistant even to carbapenem. It is an emerging problem. Doctors in Greece had published colistin-resistance data in 2006, and the US recorded it two years ago," said infectious diseases consultant Dr Abdul Ghafur, one of the authors of the paper on the 13 cases. He is the coordinator of Chennai Declaration that has laid out guidelines for hospitals and doctors on antibiotic use.

Laxminarayan said the use of colistin itself is a concern. and its use was stopped owing to its toxicity four decades ago. "It is not a preferred antibiotic. In Vietnam, it was used only in animals till a few years ago," he added.

However, India has little choice but to use the drug to treat the rising resistance to carbapenem, a third-generation antibiotic used to treat cases resistant to lower drugs. Most hospitals are still wary of reporting colistin-resistance figures, but doctors admit that it is time to acknowledge the problem so that corrective measures can be taken.