

Clinical Ceftriaxone Audit in the Medical Wards of Hospital Tengku Ampuan Rahimah Klang

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Abstract

Ceftriaxone use in HTAR Klang is the highest among the hospitals in Selangor. 84% of the total ceftriaxone use in HTAR Klang was from the medical wards. The extended-spectrum beta-lactamases (ESBL) rates in HTAR is also increasing. Reports have shown that amongst the drivers of ESBL was injudicious use of third generation cephalosporin. To evaluate the indication of ceftriaxone use in the medical wards and identify areas that can be improved to promote appropriate ceftriaxone prescribing. All patients who were given ceftriaxone in eight medical wards from April 13th – May 7th, 2018 were prospectively enrolled in this audit. Patients' notes and medication charts were reviewed and data included demographics, dose, duration, microbiological cultures and clinical indication for use of ceftriaxone were collected by the ward pharmacists. Collected data was analysed using Microsoft Excel pivot tables. We found that the Ceftriaxone use in all cases (n=105) were empirical. 78% of the cases had cultures taken prior to starting ceftriaxone and majority of the cultures were no growth. De-escalation at 72 hours was only done in 13% of cases. Majority of the indication for ceftriaxone use was community acquired pneumonia (CAP). From this audit we found that the treatment for CAP was incompliant to the National Antibiotic Guidelines 2014, which suggested penicillin-based antibiotics as first line. Secondly, the antibiotics should be streamlined if cultures were no growth after 72 hours. We aim to implement educational intervention and re-audit after three months.

Keywords: Ceftriaxone audit; Ceftriaxone indication; appropriate prescribing

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