OP 15

Analysis of data of urine culture isolates of 2014 sent from seven laboratories of National Laboratory Based Surveillance of Sri Lanka College of Microbiologists

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Objectives

1. To determine the aetiological agents of midstream urine cultures with a colony count of $>10^5$ CFU/ml.
2. To analyse the antimicrobial susceptibility patterns of urine culture isolates of 2014.

Method

The National Laboratory Based surveillance on antimicrobial resistance is a collaborative project of the Ministry of Health and the Sri Lanka College of Microbiologists. In this project midstream urine cultures with a colony count of $\geq 10^5$ CFU/ml were analysed. The specimens were processed according to the standard protocol specified in the laboratory manual in microbiology. Antibiotic susceptibility tests were performed according to the method established in the centre which is either by CLSI method or by Stoke's comparative disk diffusion method. Data of 2014 sent by the participating laboratories were analysed using WHONET 5.6 software.

Results

The data was received from seven centres. They were The National Hospital of Sri Lanka, Sri Jayewardenapura General Hospital, Lady Ridgeway Childrens' Hospital, Faculty of Medicine, Colombo, Faculty of Medicine, Ragama, Faculty of Medicine, Sri Jayewardenapura and North Colombo Teaching Hospital, Ragama.

A total of 4441 significant isolates were analysed. The majority were Gram negative enteric organisms, commonly known as coliforms, with 3975/4979 (79.8%) isolates. The others were Candida species 408, *Enterococcus* species 254, *Pseudomonas* species 194, coagulase negative Staphylococcus species 59, *Staphylococcus aureus* 36, *Acinetobacter* species 35 and Group B beta-haemolytic Streptococcus 18.

The coliforms from adults who were attending outpatient clinics had 55.2% (112/203) susceptibility to cephalexin and cephradine, 54% (161/298) to amoxycillin/clavulanic acid, 65.1% (278/427) to nitrofurantoin, 48.3% (144/298) to norfloxacin, 63.4% (189/298) to cefotaxime, 97.4% (113/116) to imipenem and 100% (90/90) to meropenem. The adult inward patients had 39.5% (519/1313) susceptibility to cefotaxime, 87.9% (445/506) to meropenem, 62.6% (812/1298) to gentamicin and 31.9% (405/1281) to ciprofloxacin. The coliforms isolated from paediatric outpatients had 58.5% (69/118) susceptibility to cephalexin and cephradine, 58.5% (76/130) to amoxycillin/clavulanic acid, 80% (16/20) to nitrofurantoin, 85% (17/20) to cefotaxime and 89.7% (26/29) to meropenem. The paediatric inward patients had 64.6% (53/82) susceptibility to cefotaxime, 90.5% (19/ 21) to meropenem and 80.2% (65/81) to gentamicin.

Conclusion

Coliforms, the commonest organism causing urinary tract infections (UTI), had high resistance rate in in-ward patients but the resistance was less in outpat especially in the paediatric age group.

OP 16

Comparison of bacterial characteristics (I of Gram negative bacteria isolated patients with neutropenic sepsis pre and levofloxacin prophylaxis

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Febrile neutropenia is a life-threatening complicat occurs frequently during chemotherapy with ass high mortality. Antibacterial prophylaxis is an est strategy to prevent this. Fluoroquinolone prophy been considered for high-risk patients with prolor profound neutropenia (ANC<1000mm^3), bu emergence of resistance has been a concern.

Levofloxacin was used as prophylaxis du neutropenic period in chemotherapy-induced ne patients at Leicester Royal Infirmary Hospita United Kingdom since 2010.

Objectives

Compare number of blood culture positivity in 2010) and post (2010-2012) levofloxacin p periods and compare sensitivity of ciproflc meropenem in Gram negative isolates from r patients of above periods in LRIH.

Design, setting and methods

1. Retrospective data collection d haematology Gram negative bacter base, and relevant clinical and laboratc retrieved from case notes and compute system.
2. VITEC-MIC and E-strip MIC for ciprc meropenem were performed or negatives retrieved from saved bead
3. From 210 total blood culture posi levofloxacin period, for 45 isolates MIC and 44 isolates for meropene performed.
4. From 88 total blood culture posi levofloxacin period, for 79 for ciproflc for 78 isolates for meropenem MIC w

Results

Number of blood culture positivity has rec to 88 with prophylaxis. Both MIC metho strip) gave similar sensitivities for tested isolates. The numbers of resistant isolate