

peripheral blood revealed reduction of T and B lymphocytes, with normal immunoglobulin values. Karyotype test revealed a pattern of trisomy 8. Upon arrival, he appeared well. There was no lymphadenopathy. All viral serologies were negative. WBC showed 1% blast cells, and C-reactive protein was elevated. CT scan of the chest showed centrilobular emphysema, subpleural and bronchovascular reticular opacities, and both hilar and mediastinal lymphadenopathy. Imaging of the abdomen revealed hepatosplenomegaly. Myelogram was normal. Bone marrow histology showed hypercellularity with abnormalities on the megakaryocytic and erythroid lineages, and emperipolesis. BCR-ABL was not detected. Bronchoscopy showed inflammation of the main left bronchial mucosa. Lavage was negative for malignant cells, as were cultures. IP on the lavage showed a CD4/CD8 of 0.6. A mediastinal lymph node biopsy was performed, showing a large and irregular paratracheal lymph node. Pathological analysis revealed suppurative granulomas. Direct bacilloscopy was negative. Culture was positive for *M. kansasii*. He was discharged home and referred to a specialized center for treatment of atypical mycobacteriosis. **CONCLUSION:** The best diagnostic approach for this young patient with chronic inflammation would be that of fever of unknown origin. The prolonged duration of his symptoms speaks against most solid or aggressive neoplasms and bacterial infections. Immune status should always be assessed, and granulomatous conditions should be kept in the differential. Atypical mycobacteriosis can affect various organ systems, requiring a high level of suspicion.

2147

EARLY READING OF THE SUSCEPTIBILITY TEST BY BROTH MICRODILUTION FOR POLYMYXIN B: COMPARATIVE ANALYSIS OF VISUAL READING WITH AN AUTOMATED (SPECTRAMAX M3) MICROPLATE READER

CATEGORIA DO TRABALHO: PESQUISA

Maiara Dos Santos Carneiro, Ayme Duarte Echevarria, Camila Mörschbacher Wilhelm, Fabiana Caroline Zempulski Volpato, Priscila Lamb Wink, Afonso Luis Barth
HOSPITAL DE CLÍNICAS DE PORTO ALEGRE
UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL

Background: Polymyxin B is considered a last line drug for the treatment of infections caused by Gram negative rods. Molecular methods to detect Polimixin B resistance present limitations due to varying genotypes and differences in plasmid or chromosomal origin. On the other hand, the standard phenotypic method (Broth Microdilution - BMD) to determine the susceptibility to Polymyxin B is laborious and time consuming. Therefore, rapid phenotypic methods are highly desirable to detect resistance to Polymixyn B. To date, there are no studies evaluating early readings of the BMD methodology. Purpose: This study aimed to evaluate the reading of the BMD technique after an incubation time of 8-9 h (early incubation) in comparison to 16-20 h (standard incubation) for gram negative bacteria. We also compared the results obtained in early and standard incubation times by visual reading and with an automated microplate reader (SpectraMax M3). Material and methods: A total of 55 isolates (40 Enterobacterales, 11 *P. aeruginosa* and 4 *A. baumannii* complex) were evaluated and the minimum inhibitory concentrations (MIC) were read in early and standard incubations by both visual reading and SpectraMax M3 (at absorbance wavelength of 450 nm). To classify the isolates into susceptible and resistant using the optical density by SpectraMax M3, a cutoff point for early and standard incubations were defined as 0.140 and 0.340, respectively. Results: There were no differences in the susceptibility patterns using rapid and standard incubations for the non-fermenters group. On the other hand, only 2 isolates of Enterobacterales were classified as susceptible according to the early incubation and became resistant in standard incubation, both in visual and in a microplate reader. In the SpectraMax M3 analysis, based on the cutoff points established, it was possible to correctly classify all susceptible and resistant isolates. Conclusion: Our findings indicated a high agreement (96.36%) between the early and standard incubation times indicating that the automated reading (SpectraMax) can be used to speed up MIC readings.