Accuracy of Bactident Aminopeptidase Test in Identification Gram Negative Bacteria

Abstrak:

The information about Gram stain of a bacteria can help the clinicians to choose good antimicrobial therapy because many of antimicrobial drugs have activity to positive or negative Gram bacterial selective. So it needed to have a method to early identification Gram stain of bacteria, which can be faster, cheaper and more practice. Identification of Gram stain we can do with Bactident aminopeptidase test, Gram stain test and culture test. The aimed of this study is to know the accuracy of bactident aminopeptidase test with culture test in identify Gram negative bacteria. A diagnostic test was done among 60 samples (pus and sputum) at Sub Unit Infection Disease Dr.Wahidin Sudirohusodo public Hospital of Makasar from March to July 2008. Bactident aminopeptidase test, Gram stain test and culture test were done to each sample. The data was analysed with 2 × 2 table. Accuracy of Bactident aminopeptidase test on culture test were high sensitivity 61.11%, specificity 100.00%, positive predictive value (PPV) 100.00% and negative predictive value (NPV) 63.16%. Sensitivity of Bactident aminopeptidase test on culture test were lower than sensitivity of Gram stain test on culture test (61.11% vs 83.33%). Specificity of Bactident aminopeptidase test on culture test were higher than specificity of Gram stain test on culture test (100.00% vs 79.19%). Accuracy of Bactident aminopeptidase test on Gram stain and culture test is high enough, it can lead us conclude that Bactident aminopeptidase test can be usefull to the clinician for using the antimicrobial before culture test was provided.

Keyword:

Bactident aminopeptidase test, gram stain, culture test, gram negative bacteria