

ABSTRACT

TESTING THE EXISTENCE OF EXTENDED SPECTRUM BETA LACTAMASES ENZYMES (ESBL) IN *Klebsiella pneumonia* FROM CLINICAL ISOLATES FROM ABDUL MOELOEK HOSPITAL AND LAMPUNG PROVINCIAL REGIONAL HEALTH LABORATORY PERIOD OCTOBER - DECEMBER 2011

By

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Klebsiella pneumoniae is a nosocomial pathogen that can cause intensive consolidation in the lungs, urinary tract infections, and septicemia. The extends use of betalaktam antibiotics as therapy has led to the emergence of resistance to the betalaktamase enzyme. The third cephalosporin generation that previously can overcome betalaktamase enzyme also develop resistance because of a mutation that caused the emergence of extended spectrum betalactamases enzymes (ESBL). These enzymes are easily transferred to other bacteria, resisten to many other antibiotics, cause higher morbidity and mortality rate.

The purpose of this study was to determine the presence of ESBL enzymes in *Klebsiella pneumonia* from clinical isolates from Abdul Moeloek Hospital and

Lampung Province Regional Health Laboratory as a cause of resistance to third cephalosporins generation.

The research method is an experimental laboratory. Samples were taken from 20 isolates of *Klebsiella pneumonia* in Bandar Lampung period of October to December 2011. Screening using Kirby Bauer diffusion method and the confirmation test with Double Disk Synergy Test.

The results showed the prevalence of ESBL producing *Klebsiella pneumonia* in Bandar Lampung was 30 % (6/20).

Keywords: *Klebsiella pneumonia*, Double Disk Synergy Test, ESBL