

## عنوان مقاله:

APPLICATION OF MULTIPLEX-PCR IN THE DETECTION OF OXA PLASMID GENES IN CLINICAL ISOLATES OF KLEBSIELLA PNEUMONIAE

محل انتشار:

نوزدهمین کنگره بین المللی میکروب شناسی ایران (سال: 1397)

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## خلاصه مقاله:

Background and Aim: A large proportion of clinical samples are infected by Klebsiella. Nowadays, the extensive use of braodspectrum β-lactams has increased resistance to β-lactams worldwide. Nowadays, the extensive use of braodspectrum β-lactams has increased resistance to β-lactams worldwide. The goal of this research was to investigate the effectiveness of multiplex-PCR technique in simultaneous detection of pathogenic genes in Klebsiella pneumoniae.Methods:96 isolates were collected from Imam Khomeini and Chamran Hospital in Boroujerd. Disc diffusion sensitivity test was performed according to CLSI standard. To identify the oxa genes, multiple PCR tests were used.Results:10 isolates had oxa-1 gene with the highest resistance to ceftriaxone and the highest sensitivity to meropenem. Two isolates of were reported to had the oxa-9 gene with the highest resistance to ceftriaxone and the highest sensitivity to meroponem. 1 isolstes had both of the oxa-1 and oxa-9 genes with was resistant to amoxicillinclavulanate and susceptible to meropenem, ertapenem, aztreonam and ceftriaxone. oxa-2 and oxa-48 genes were not detected in any of the samples. The highest susceptibility to maropenem and orthranem was and and the highest resistance was reported for amoxicillin-clavulanate and ceftriaxone. Of the 96 isolates of Klebsiella, 68 were susceptible to antibiotics and 11 isolates had oxa family genes. Conclusion: The isolates with oxa family genes, mostly in the emergency department, were isolated from the urinary tract from women and have the highest resistance to ceftriaxone and the highest sensitivity of to meropenem. the meropenem, ertapenem and aztreonam are more .effective in treatment

## كلمات كليدى:

Klebsiella pneumoniae, oxa genes, Multiplex-PCR, Borujerd

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