

Multidrug-Resistant Acinetobacter baumannii: An Emerging Health Threat in Aseer Region, Kingdom of Saudi Arabia

Abstract

The study aims to determine the prevalence of multi-drug resistant A. baumannii in Aseer region, Kingdom of Saudi Arabia. Methods: This study evaluated the antibiotic susceptibility of ninety four (n =94) clinical isolates of A. baumannii. The isolates were collected from the south region of Saudi Arabia; and notably Aseer region, during the period from 15 October 2014 to 15 January 2015. The isolates were tentatively identified as A. baumannii by routine bench tests; and were confirmed by using VITEK® 2 Compact. The latest instrument was used to identify antibiotic susceptibility of these isolates. Results: Antibiotic susceptibility in this study showed that 69% of these isolates were multi-drug resistant strains. Moreover, they were highly resistant to carbapenem drugs. Several strains of these isolates were found to be extremely resistant to test antibiotics, and were only sensitive to one or two of them. Conclusion: High rate of multi-drug resistance A. baumannii bacteraemia has emerged in the south region of Saudi Arabia as an important health problem. Therefore, it is considered as a new threat in hospitals, which requires a tremendous effort to stop its escalation and spread.

Publication

Rinninella E, Raoul P, Cintoni M,(2019) What is the Healthy Gut Microbiota Composition? A Changing Ecosystem across Age, Environment, Diet, and Diseases. Microorganisms 7(1): 14

Likotrafiti E, Tuohy KM, Gibson GR, Rastall RA (2013) Development of antimicrobial synbiotics using potentially-probiotic faecal isolates of Lactobacillus fermentum and Bifidobacteriumlongum. Anaerobe 20: 5–13.

Alakomi HL, Skyttä E, Saarela M, Mattila-Sandholm T, Latva-Kala K, Helander IM (2000) Lactic acid permeabilizes gram-negative bacteria by disrupting the outer membrane. Applied and Environmental Microbiology 66(5): 2001-2005

Valdés-Varela L, Ruas-Madiedo P, Gueimonde M (2017)In vitro fermentation of different fructooligosaccharides by Bifidobacterium strains for the selection of synbiotic combinations.International Journal of Food Microbiology 242: 19-23.

Mohammed K Almaghrabi

King Khalid University, Saudi Arabia

Biography

Mohammed K Almaghrabi is currently pursuing her Doctoral studies at ICAR-NIANP, Bangalore, India. She has completed her masters in Biotechnology. Her area of research interest is related to nutraceuticals and its effect on gut health. Her research work is focused to establish an effective and acceptable enzymatic process of D-tagatose production keeping in view the expected demands of D-tagatose in near future and to evaluate its prebiotic and anti-diabetic propertiesthrough in- vitro and in-vivo experimental models. She has experience in research and teaching. Her interest lies in conducting a long-term scientific research in the field of nutraceuticals and their role in modulating the gut microbial composition impacting the health and well-being of both animal and human.



Rheumatology-Immunology, Women's Health and Pharma Science | September 21, 2020 | Webinar

Citation: Mohammed K Almaghrabi, *Multidrug-Resistant Acinetobacter baumannii: An Emerging Health Threat in Aseer Region, Kingdom of Saudi Arabia*, Rheumatology-Immunology, Women's Health and Pharma Science on September 21, 2020, Webinar, pp: 36