OMICS Group Conferences
Accelerating Scientific Discovery

International Summit on
Clinical Pharmacy & Dispensing
November 18-20, 2013 Hilton San Antonio Airport, TX, USA

Prevalence of virulence factors and accessorygene regulator (*agr*) types in methicillin-resistant *Staphylococcus aureus* (*mrsa*) isolated from diabetic foot ulcer

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The agr locus is important for virulence in a variety of animal models of infection, and has been assumed by inference to have a major role in human infection. The effector molecule of the *agr* system is a regulatory RNA, called RNAIII, whose synthesis is dependent on *agr* activation and driven by the P3 promoter of the agr system, RNAIII inhibiting peptide (RIP), is very effective in treating severe polymicrobial infections, including drug-resistant staphylococci like MRSA, since RIP downregulates the expression of genes involved in biofilm formation and toxin production, and upregulates genes involved in stress response.The fact that determining virulence genes may help to differentiate no infected from infected wound is an attractive previous result since the virulence genes of *S. aureus* were present significantly more in wound with grades 2-4 ulcers than grade I. So we will explore in the paper the virulence profile, the presence and functions of *agr* locus, clarify a possible relation between *agr* groups and wound grading in cases presented with diabetic foot ulcers in our locality.

Biography

Nesrene Omar has completed her Ph.D. from Mansoura University after her scientific activities as a research associate in Molecular Virology Dept., Baylor College Of Medicine, Houston, Texas, she is a Professor of Medical Microbiology & Immunology since 6 years and also Consultant Infection control, with membership to local and international Society as Healthcare infection Society, attending 6 International conferences with 16 presentation and 23 local conferences with 13 presentation with the following last international publication: Novel antibiotics for the management of diabetic foot infections, A laboratory evaluation of the antibacterial and cytotoxic effect of Liquorice when used as root canal medicament and Nosocomial infections in neonatal intensive care units in developed and developing countries: how can we narrow the gap.

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