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## Potentiation of gentamicin induced nephrotoxicity by molsidomine in rats

Sabah H Akrawi<sup>1</sup>, Marwan S Al Nimer<sup>2</sup>

<sup>1</sup>College of Clinical Pharmacy, King Faisal University, Al Hasa , KSA

<sup>2</sup>College of Medicine, Al Yarmouk University, Baghdad, Iraq

Reactive oxygen metabolites have been implicated in gentamicin induced nephrotoxicity. This study tests whether or not nephrotoxicity of gentamicin is associated with cellular activation or lipid peroxidation and the use of vasodilator, molsidomine, plays a role in the renal lesion. Male Wister 200-300 g rats were distributed randomly into five groups, Saline treated group, Molsidomine treated group, Gentamicin treated group, Molsidomine + Gentamicin treated group, and Gentamicin + Ethanol treated group. The results showed that gentamicin induced nephrotoxicity was associated with a significant activation of cellular lipid peroxidation manifested by high serum and cortical tissue malondialdehyde, and the use of molsidomine aggravates this process. These data indicate that vasodilators and in particular those with nitric oxide (NO) donating property may be extremely harmful when used with gentamicin.

### Biography

Sabah Akrawi, PhD, graduated from the College of Pharmacy/University of Kentucky/USA. He is an assoc. Prof. of Clinical Pharmacokinetic and Biopharmaceutic and a faculty member at the College of Clinical Pharmacy/King Faisal University/KSA. He supervised 17 postgraduate pharmacy students, and he has published more than 26 articles. He is a member of the scientific council of the KFU and chaired many defense committees for graduation of graduate students.

shakrawi@hotmail.com

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