

رتبه سوم خارجی
Foreign Third Winner

Project Title:

Gentamicin Nephrotoxicity in Rats and its Modulation by other Drugs and Studies on the Pharmacology and Toxicity of the Traditional Medicinal Plant *Rhazya Stricta*

Researcher:

Badreldin Ali (Ph.D.)

Country:

Sudan

University:

King Saud University



عنوان طرح:

مسمومیت کلیه ناشی از جنتامایسین در موشها و تنظیم آن توسط سایر داروها

محقق:

دکتر بدرالدین علی

کشور:

سودان

دانشگاه:

دانشگاه ملک سعود عربستان سعودی

Abstract:

Gentamicine is an important aminoglycoside antibiotic that is completely serious and life-threatening infections. Its Therapeutic usefulness is, however, limited by its nephrotoxicity. About 15-25% of patients treated with this antibiotic suffer from some form of impairment of renal function. Our work on the nephrotoxicity of this antibiotic centered on :

- a) Studying some biochemical correlates in a rat model of nephrotoxicity.*
- b) Testing the salutary and detrimental effect of some agents that can ameliorate or augment the nephrotoxicity of gentamicin if taken concomitantly with it.*

*The project also attempts to explain the folk medicinal actions of *Rhazya Stricta* in terms of conventional pharmacology, toxicology and biochemistry. The safety and efficacy of the plant was studied by investigating several basic toxicological and pharmacological profiles of the plant in rats, mice and rabbits models. The results indicate that the plant leaf extracts and fractions were of low toxicity and posses many dose-dependent and non-dose-dependent actions on the central nervous, endocrine and cardiovascular systems that can explain the folk medicinal use, and can help the pharmaceutical industry to obtain useful compounds from the plant.*