

EFFECT OF VORICONAZOLE ON ORAL HYPOGLYCEMIC AGENT IN STREPTOZOTOCIN INDUCED DIABETIC ANIMALS

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The study was intended to find the pharmacodynamic drug interaction of an oral antidiabetic agent like Nateglinide and antifungal agent like Voriconazole in normal healthy albino rats, rabbits and diabetic rats. The dosage calculations were based on therapeutic dose of human extended to animals. The diabetic was induced by Streptozotocin (50mg/kg i.p). The blood glucose was measured by GOD/POD method using kits manufactured by Pathozyme Diagnostics. Voriconazole pretreatment for one week has not been significantly influenced the onset but peak and duration of hypoglycemia enhanced induced by Nateglinide significantly in healthy albino rats, rabbits and diabetic rats.

INTRODUCTION

A study which was conducted on drug-drug interactions in selected community pharmacies in which out of 1368 prescriptions evaluated over a span of 3 months, 613 interactions were found in 516 prescriptions, out of which 16.15% interactions were severe, 3.75% interactions were found where patient was receiving more than 8 drugs and 11.58% interactions had a significance level. Hence a concrete effort is required to minimize the problem of drug-drug interactions, while practicing polypharmacy. Keeping the above statistics and severity of the problem in view, it is essential to understand the possible mechanism of drug-drug interactions and to generate the scientific data on possible drug interactions (Rohit *et al* 2004). The incidence of type 2 diabetes mellitus is increasing day by day disappointingly. It is a serious disorder with significant public health implications (Satoskar *et al* 1997). Among diabetics approximately 95% of patients have type-2 Diabetes mellitus, whereas, about 5% of patients have type-1 diabetes mellitus (Mahesh *et al* 2008). The patients with diabetes mellitus are at risk for microvascular and macrovascular complications that increase morbidity and mortality (Satyanarayana *et al* 2003). Also the Patients with diabetes also suffer from fungal infections. There are documented reports about frequent occurrence of the fungal infections in diabetics (Melander *et al* 1999). Most commonly using antifungal agents in fungal infections are Fluconazole, Itraconazole, Griseofulvin and Voriconazole etc. (Gupta *et al* 1999, Teijo *et al* 2008). In that Voriconazole, a widely using antifungal drug to treat fungal infections. Meglitinides are Nateglinide,

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