Summary & Conclusion

Terazosin is an α1 blocker which is indicated in the therapy of mild and moderate hypertension as single therapy or associated with other antihypertensive drugs, in peripheral vascular disease and in cases of refractory congestive heart failure. It is also used in benign prostatic hypertrophy.

The present study was carried out to screen the effect of terazosin on blood pressure, renal blood flow parameters, insulin resistance, blood glucose, cholesterol and triglycerides in experimental albino rats. Insulin resistance was induced experimentally by feeding rats 10% fructose in drinking water for 4 weeks . Also in vitro studies were done to investigate site of action of terazosin.

Data obtained in the present study pointed out that treatment of insulin resistant male albino rats with terazosin for 10 days was associated with an improvement in both systolic and mean blood pressure, biochemical changes associated with insulin resistance, as it leads to reduction of blood glucose , serum cholesterol and improvement in insulin sensitivity. Insignificant effect on triglycerides was noted.

As regard its effect on renal blood flow parameters, terazosin significantly decreased renal blood flow &renal artery systolic blood pressure, but it has insignificant effect on renal artery resistance ,heart rate and pulsitility index .

In vitro studies on isolated rat aortic strip & rat's heart revealed that terazosin has cholinomimetic effect beside its α1 blocking effect, as it leads to contraction in the aortic strip preparation and it has negative chronotropic effect on the heart these effects are abolished by atropine .

Experiments on isolated perfused rat's hind limb preparation showed terazosin peripheral vasodilator effect.

In conclusion ,it may be highly recommended to use terazosin in treatment of hypertension and prostatic hypertrophy especially in diabetic hypercholestolemic patients.

Terazosin must be avoided in diabetic autonomic neuropathy to avoid urinary incontinence .