

Comparative Study of Efficacy and Safety between Human Soluble Insulin and Biphasic Isophane Insulin in Type II Diabetic Mellitus

Irfanuddin, Md; Prashanth, K;

Mohammed Irfanuddin, Tutor, Dept of Pharmacology, Rajiv Gandhi Institute of Medical Sciences (RIMS) Adilabad. Email: irf_13@rediffmail.com +919948348718.

<http://dx.doi.org/10.18049/jcmad/338>

Abstract

Among different insulin preparations available for the management of type II diabetes mellitus (DM), human soluble regular insulin (Human Actrapid) and human biphasic isophane insulin (Human Mixtard) are commonly prescribed agents. We compared the efficacy and safety of both the insulin for glycemic control in type II DM. Effects on lipid profile is also assessed. Fasting blood sugar was found to improve in both groups but the percentage change in Mixtard group (14.5%) was more than Actrapid group (6.26%). Postprandial blood sugar level also was better controlled in Mixtard group (14.4%) than Actrapid group (5.19%). Both the drugs were well tolerated without any alarming side effects. In Mixtard group, total cholesterol, low density lipoprotein (LDL) and very low density lipoprotein (VLDL) were controlled better whereas high density lipoprotein (HDL) and triglyceride were found to be improved more in Actrapid group. Hence it can be concluded that blood sugar control is better with Mixtard group.