

**TITLE**

**Comparison of  
McAuley/fasting  
insulin indices with  
ATP III clinical criteria  
for the diagnosis of  
insulin resistance  
in type 2 diabetes  
mellitus**

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To estimate the prevalence of insulin resistant syndrome (IRS) among newly diagnosed patients with type 2 diabetes and to test their validity against two indices of insulin resistance (IR). Prevalence of IRS was estimated according to the criteria used by ATP III in newly diagnosed type 2 diabetic patients. Sensitivity and specificity of the ACE criteria were calculated against two indices of IR namely fasting insulin (FI) level > 12 mU/l and McAuley index (McA) < 5.8. [McA =  $\exp [2.63 - 0.28 \ln(\text{insulin in mU/l}) - 0.31 \ln(\text{triglycerides in mmol/l})]$ ]. 35.7% of patients had IRS by ATP III criteria. 64.3% of patients were insulin resistant by FI and McA in each index. In patients who had IRS with ATP criteria, 80% and 86.6% were found to have McA and FI in the insulin resistant range. Out of the patients who were resistant by McA, only 40.6% had IR by ACE criteria and 93% had shown IR by FI. Out of all patients who did not fulfill the ATP III for IR, 74% and 59% were detected as having IR by fasting insulin and McA respectively. Sensitivity of the ACE criteria when tested against the FI and McA were 37.5% and 40.6%, specificity were 70% and 80%, respectively. IRS was common among the newly diagnosed patients with type 2 diabetes. ACE criteria showed an acceptable specificity but lack adequate sensitivity when compared with the two Indices of insulin resistance. More valid and clinically useful criteria should be available for the accurate diagnosis of IRS in clinical practice.

**Biography**

Dr Hettihewa had completed her PhD on pharmacology and molecular immunology in 2003. It was conducted in the Nagasaki University of Japan and degree consist of split work between University of Ruhuna and Nagasaki University. She is the Head of department of Pharmacology Molecular Science and Biomedical Unit as well as the coordinator of Bpharm degree programme in the faculty of Medicine. She has around 15-20 publications in reputed and index journals and delivered orations relation to the insulin resistance. She is a supervisor for man postgraduate students in this faculty. She has been given the honorary membership in American Diabetic Association.

Prof Weerathna is professor of Medicine in the faculty of Medicine after obtaining his MD. He is specialized in endocrinology and conducting lot of clinical research on diabetes regimes and mechanism of insulin resistance. He has many publications in national and international journals and and participated for many congresses and workshops in many international forums.