



Prospective Randomized Controlled Trial of Myocardial Protection by Activation of Preconditioning Mechanisms with Glucose-Insulin-Potassium or Ramipril in Patients Undergoing Coronary Intervention

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Abstract:

Background: Preconditioning (PC) is triggered via additive parallel pathways. PTCA induced enzyme leak is a human preconditioning model correlating to outcome. We aim to test myocardial protection by Glucose-Insulin-Potassium (GIK) and Ramipril (ACEI) in humans.

Methods: 226 consecutive patients undergoing PTCA were randomized to groups 1 Ramipril 5mg (2.5mg if <50Kg). 2 GIK (30% glucose, 50 units actrapid insulin, 80mmol potassium at 1.5 ml/Kg/Hr), 3 ACEI and GIK, and 4 placebo. **Exclusions:** age >70, creatinine > 200 mmol/l, rising troponin levels (tnt), and contraindications to ACEI/GIK. Tnt was taken at -6, 0, and + 12 hours.

Results: 226 patients aged 57.2 years with 79% males. The post procedural tnt, tnt rise, and %tnt



Biography: Dr Eugene B Wu has completed his MD in Cardiology from the University of London in 2001. He is currently working at the Prince of Wales Hospital Chinese University Hong Kong as a consultant Interventional Cardiologists. He is the director of APCTO club, and he has a residual interests in myocardial protection. He has published more than 40 papers in reputed journals.

Publications:

1. Evaluating the Mechanical Properties of Admixed Blended Cement Pastes and Estimating its Kinetics of Hydration by Different Techniques
2. Genetic Diversity Using Random Amplified Polymorphic DNA (RAPD) Analysis for *Aspergillus niger* isolates
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