



International Conference on Medicinal and Pharmaceutical Chemistry

December 5-7, 2016 Dubai, UAE

Aspirin and blood glucose and insulin resistance

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Objective: A potentially important role of IKK β in mediating insulin resistance and the ability of salicylates to inhibit IKK β activity is suggested. We decided to examine the role of different doses of aspirin (low, moderate and high) in experimentally induced diabetic rats. **Materials and Methods:** Diabetes Mellitus (DM) in rats were induced by administration of nicotinamide (NAD), 15 min prior to the single dose of streptozotocin STZ i.p. Ninety male albino rats were used in this study. They were divided into 6 main groups. The first was served as control, which receives no medications. The second group was diabetic induced rats as mentioned above. The third group was controlled by insulin after induction of D.M. Groups from the fourth to the six consist of 20 diabetic induced rats and further subdivided into rats taking either aspirin alone in different doses (low, moderate or high) or aspirin and insulin. **Results:** Different doses of aspirin showed that moderate and to a greater extent high dose aspirin administration to diabetic rats have greater impact on fasting blood glucose levels whether treated with insulin or not. Again, HBA1c % in diabetic rats treated with insulin and receiving high dose aspirin was lower than diabetic rats treated with insulin only or even taking low dose aspirin. **Conclusion:** The study concluded that the inflammatory pathways hold a substantial part in insulin resistance in type 2 DM.

Biography:

Abdullah A. Alshamrani was born on February 25, 1992 in Jeddah-Saudi Arabia. Graduated from Umm Al-Qura (UQU) University in Makkah-Saudi Arabia with a bachelor's degree in medicine and surgery on June 2016. He currently work as a medical intern. . Interested in internal medicine and health awareness campaigns. Hoping to be a good doctor one day.

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