Insulin resistance: Reading

- <u>Biomed Res Int.</u> 2017;2017:7839101. doi: 10.1155/2017/7839101. Epub 2017 Nov 7.
- Macrovascular Complications in Patients with Diabetes and Prediabetes.
- Huang D et al.,
- Abstract
- Diabetes is a significant health problem worldwide, and its association with cardiovascular disease (CVD) was reported in several studies. Hyperglycemia and insulin resistance seen in diabetes and prediabetes lead to an increase in reactive oxygen species, which triggers intracellular molecular signaling. The resulting prothrombotic state and increase in inflammatory mediators expedite atherosclerotic changes and the development of macrovascular complications. Individuals with diabetes or prediabetes have a higher risk of developing myocardial infarction, stroke, and peripheral artery disease. However, no significant difference in cardiovascular morbidity has been observed with tight glycemic control despite a reduction in some CVD outcomes, and the risk of adverse outcomes such as hypoglycemia was increased. Recently, some GLP-1 receptor agonists and SGLT-2 inhibitors have been shown to reduce cardiovascularevents and mortality. In this review we give an overview of the risk and pathogenesis of cardiovascular disease among diabetic and prediabetic patients, as well as the implication of recent changes in diabetes management.