

Conducting Literature Review on Alcohol-Drug interaction in diabetic patient which leads to causing severe effects on the diabetic patient along with the treatment to resolve the adverse effects.

Abstract:

Introduction on the effect of alcohol consumption (mild or moderate or excessive amount) in diabetic patients along with their diabetic treatment leads to result into Alcohol-drug interactions.

Alcohol can affect blood sugar levels in patients with diabetes. Both low blood sugar (hypoglycemia) and high blood sugar (hyperglycemia) may occur, depending on how much and how often they drink. Combining alcohol with medications that also lower blood sugar can result in serious interactions due to an additive effect.

Alcohol-Drug Interaction with Diabetic medications:

However, Drug interaction with alcohol cause severe life-threatening conditions. The alcohol-metformin interaction can increase the risk of a rare but dangerous condition called lactic acidosis.

Alcohol- insulin interaction cause increased or decreased glucose lowering effect of insulin. Long-term alcohol use can also make cells less sensitive to insulin. This means that they absorb less glucose from the blood, and levels in the bloodstream increase.

The alcohol consumption also increased risk with people who taking statins which caused alcohol drug interactions into their body & also with type-2 diabetic patients.

Over time, alcohol consumption damages the liver, especially when a person drinks to excess. It reduces the liver's ability to produce and regulate glucose.

Complex Alcohol-Drug interaction: side effect of drug interferes with Alcohol and produce combined alcohol-drug interaction like Metformin may reduce vitamin B-12 absorption in some people. Alcohol can also interfere with B-12 absorption by causing inflammation in the stomach.

This provides future research topic for patients and people consuming alcohol and not aware of the severity of this interaction. Can do research on this enzyme which is responsible for metabolism of alcohol & diabetic drug and do finding through designing of computational drug discovery model in which body does not give priority to metabolize alcohol over drug metabolism and both drug and alcohol not interact with each other.

References: <https://www.drugs.com/article/diabetes-medications-alcohol.html>

<https://www.medicalnewstoday.com/articles/317311>

<https://www.goodrx.com/conditions/diabetes-type-2/is-it-safe-to-drink-alcohol-diabetes>