PENINGKATAN KADAR ENZIM TRANSMINASE SEBAGAI PREDIKTOR DIABETES MELITUS TIPE 2 PADA PASIEN PERLEMAKAN HATI NON ALKOHOLIK : *LITERATURE REVIEW*

Hanny Mutiarayni Balga

ABSTRAK

Latar Belakang : Diabetes Melitus (DM) tipe 2 dan *Non Alcoholic Fatty Liver Disease* (NAFLD) merupakan salah satu penyakit metabolik yang sering terjadi di dunia. Penelitian terbaru menyatakan bahwa terdapat hubungan antara NAFLD dan DM tipe 2 yaitu NAFLD dapat berprogresi menjadi DM tipe 2 dikemudian waktu. Faktor-faktor yang mempengaruhi nya beragam, salah satu indikator yang dinilai adalah enzim transaminase. Penelitian ini bertujuan untuk mengetahui apakah peningkatan kadar enzim transaminase pada pasien NAFLD dapat menjadi prediktor DM tipe 2. **Metode penelitian** : penelitian ini menggunakan metode *systematic review* dan pencarian jurnal dilakukan dengan kata kunci (*NAFLD* OR *Non Alcoholic fatty liver disease*) AND (*Liver enzyme* OR *hepatic enzyme* OR *transaminase* OR *alanine aminotransferase* OR *aspartate aminotransferase*) AND (*risk of diabetes type 2* OR *incidence of diabetes type 2*). Pencarian jurnal diperoleh dari database PubMed dan *Science Direct* dan metode sintesis data menggunakan PICO. Telaah kritis jurnal menggunakan instrumen oleh *critical appraisal skills programmed* (CASP) 2018. **Hasil** : Terdapat hubungan kejadian NAFLD dengan resiko kejadian DM tipe 2 serta peningkatan kadar enzim transminase pada pasien NAFLD merupakan salah satu faktor resiko kejadian DM tipe 2. **Kesimpulan** : Pada penelitian ini peningkatan kadar enzim transaminase baik ALT dan AST menjadi salah satu prediktor kejadian DM tipe 2 pada pasien NAFLD.

Kata Kunci: Peningkatan Enzim transaminase; NAFLD; Diabetes Melitus Tipe 2;Prediktor

ELEVATED OF TRANSAMINASE ENZYME AS A PREDICTOR OF TYPE 2 DIABETES MELLITUS IN NON ALCOHOLIC FATTY LIVER DISEASE PATIENT : LITERATURE REVIEW

Hanny Mutiarayni Balga

ABSTRACT

Background *: Type 2 Diabetes Mellitus (DM) and Non Alcoholic Fatty Liver Disease (NAFLD) is one of the most common metabolic disease in the world. Previous studies states that there is a relationship between DM type 2 and NAFLD. There is a lot of factor that influence of developing DM type 2 one of them is transaminase enzyme. We aimed to know whether elevation of transaminase enzyme in NAFLD patient can be one of the predictor type 2 DM.* ***Methods****: This study is using a systemativ review and keywords (NAFLD OR Non Alcoholic fatty liver disease) AND (Liver enzyme OR hepatic enzyme OR transaminase OR alanine aminotransferase OR aspartate aminotransferase) AND (risk of diabetes type 2 OR incidence of diabetes type 2) reported in PRISMA -P 2015. The database for this literature search is PubMed and Science Direct and synthesis methods using a PICO. This systematic review appraisal study uses the Critical Appraisal Skills Program (CASP) 2018.* ***Results*** *: There is a relationship between the incidence of NAFLD and the risk of incidence of type 2 diabetes and an increase in the levels of the transminase enzyme in NAFLD patients is one of the risk factors for the incidence of type 2 diabetes.* ***Conclusion*** *: Our result indicate that the increase in transaminase enzyme levels both ALT and AST was one of the predictor of the incidence of type 2 DM in NAFLD patients.*

Key Words*: Elevation of Transaminase Enzyme; NAFLD; Type 2 Diabetes Mellitus; Predictor*