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# PHARMACOGENETICS OF T2DM: HOW FAR HAVE WE ARE?

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It is almost axiomatic that patients vary widely in their responses to the same drug dose or concentration. Although the reasons for this are complex, genetic makeup is known as one of the factors arises due to the differences in rates of drug response. A substantial advance in pharmacogenetics field has been observed since the completion of Human Genome project (HGP). Correlations between genetics factors and drug response were found for several drugs. Currently, several drugs were approved by the US FDA with genetic indications. It is expected that correlation between genetic makeup and drug response would be found for many more drugs within the proceeding of 5 to 10 years. Genetic guided therapy is now main stream in the case of diabetes. Currently, a wide range of oral antidiabetic agents (OAD) are commercially available in the market. However, due to genetic heterogeneity, predicting the role of genetic factors in response to an antidiabetic therapy for an individual is highly challenging. Genetic polymorphisms affect the pathogenesis of Type 2 Diabetes Mellitus which results in different responses to oral antidiabetic agents. Continuing studies in pharmacogenetics will uncover further genetic variants that modify responses to diabetes medications and may offer targeted pharmacotherapy to patients. My presentation will resonate on pharmacogenetics of T2DM and my experience in Pharmacogenetics of DPP-4 inhibitor (Sitagliptin).

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