

PP 15: Haematological indices and their correlation with fasting blood sugar level in type 2 Diabetes Mellitus patients in Teaching Hospital Karapitiya, Galle, Sri Lanka.

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Introduction: Diabetes Mellitus (DM) is a complex disease characterized by chronic hyperglycaemia associated with metabolic, cellular and blood disturbances leading to long term macro and micro vascular complications. Haematological indices can be used as a marker to measure vascular complications in Type 2DM (T2DM).

Objectives: To determine haematological indices and their correlation with fasting blood sugar (FBS) level in T2DM patients who are present with oral hypoglycaemic medications.

Methods: A descriptive cross-sectional study was conducted at Teaching Hospital, Karapitiya, from October 2020 to January 2021. Study population comprised of 57 patients between 30-70 years of age who were diagnosed with T2DM and taking oral hypoglycaemic medication <15 years. Data were collected using structured questionnaire. FBS level and full blood count (FBC) parameters were reported respectively.

Results: The population who are getting oral hypoglycaemic medication for 15 years showed significant correlations in between FBS and HGB, HCT, WBC count, “NEU” count, MPV respectively (p value < 0.05). After subgrouping the population according to their medicated duration, 1-5 and 5-15 years; the 1-5 year’s treatment group showed a statistically significance differences in MPV, HGB with FBS. However, the 5-15-years subgroup did not show any significant difference.

Conclusions: The study showed that haematological indices could be useful to get an idea about glycaemic control of T2DM patients. However, the number of patients should be increased to warrantee the initial results and correlations should have made with both FBS and HBA1C for improved findings.

Keywords: Fasting blood sugar level, Haematological indices, Type 2 diabetes mellitus