OBESITY AND HAEMATOLOGICAL MALIGNANCY
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Obesity is an important risk factor contributing to the overall burden of disease worldwide. The relation between obesity and mortality from cardiovascular disease and diabetes are well established. It is also known that obesity is an important factor in cancer. Adipocytes produce adipocytokines, which participate in carcinogenesis of many solid tumours. There were also reports that adipocytokines levels independently predict the clinical outcome in cancer. However, reports on the effect of obesity and adipocytokines in haematological malignancies are limited and were inconsistent. Hence, we studied these features in haematological malignancy cases in Malaysia. The body mass index (BMI), waist:hip ratio, adipocytokines levels (leptin and adiponectin) were measured in subjects with haematological malignancy (n=29) and healthy control (n=18). There was no significant difference in the mean BMI of control and subjects. The mean waist:hip ratio in subjects were significantly higher compared to control (0.91 vs 0.82; p=0.04). The mean level of leptin was markedly raised in subjects compared to control (1.80 vs 17.41; p=0.00). The mean adiponectin level was suppressed significantly in subjects (6.54 vs 0.15; p=0.00). Subjects with good and poor initial clinical outcome did not show any significant difference in the adiposity index and the adipocytokines levels. This study supports the evidence that adiposity and adipocytokines are related to haematological malignancy similar to that of solid tumours. We also concluded that waist hip ratio is a better index of adiposity compared to BMI. However, there is no significant relation of adiposity and adipocytokines levels with the prognosis.