

BLOOD GLUCOSE CORRELATION WITH URINE KETONE BODY OF DIABETES MELLITUS PATIENTS

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ABSTRACT

Diabetes mellitus causes impaired carbohydrate metabolism, fat and protein. Examination of blood glucose during the examination is done soon because most patients who come to the hospital with a weak conditions which do not allow the patient to fast beforehand so that the required inspection are sito or immediately. Blood glucose is a very important factor in the smooth work of the body. Blood glucose is too high and lack of insulin hormone in people with diabetes mellitus causes the body to use fat as an energy source. The result of fat breaking is the body of ketone which if excessive can be detected in blood and urine (ketonuria). Diabetic ketoacidosis is an emergency condition that is a complication of diabetes mellitus characterized by the occurrence of hyperglycemia, acidosis and ketosis. The purpose of this study to determine the relationship of blood glucose while with urine ketone in people with diabetes mellitus. This research method is analytic by using cross sectional research design. This research uses 24 samples in RS Roemani Semarang taken by purposive sampling method. Each sample was tested for blood glucose while using a 400 pentra ABX tool and urine ketone examination using the H-Series Urinalysis Strips tool. The analysis used pearson correlation test using SPSS software to analyze the relationship of blood glucose with urine ketone in people with diabetes mellitus. The result of Parson corelation test showed a strong correlation between blood glucose while with value ketone ($r = 0,892$ and $p\text{-value} = 0.000$ so it can be concluded that there is a significant correlation between blood glucose and urine ketone in diabetics mellitus.

Keywords: glucose in blood, urine ketone, diabetes mellitus.