**Original article:**

**Glycated Albumin Levels In Non- Diabetic End-Stage Renal** **Disease Patients Undergoing Haemodialysis**

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**ABSTRACT**

**Introduction:** Glycated Albumin is recently using as a short term measure for glycaemic control in patients with diabetes mellitus. In this study, an attempt has been made to study glycated albumin levels, which may serve as a reliable indicator of integrated glycaemia in these patients.

**Material and Methods:** We enrolled 150 non-diabetic end-stage renal disease patients who received haemodialysis and 50 non-diabetic patients without end-stage renal disease for this study. Glycated albumin was analysed by an enzymatic method using albumin specific protease, ketoamine oxidase and albumin assay in order to avoid assay interference from uraemia and anaemia in end-stage renal disease patients.

**Results:** We found that the average glycated albumin levels in non-diabetic end - stage renal disease patients on haemodialysis was 20.2 +2.8% and that in the control group was 12.9 + 2.1 % (p < 0.001). There was no significant difference in the random blood glucose levels between the two groups. Our data indicated that glycated albumin levels are elevated in non diabetic end-stage renal disease patients undergoing haemodialysis.

**Conclusions:** We conclude that the elevation in glycated albumin level cannot be solely explained by glucose re absorption from the dialysis and that it reflects true glucose intolerance. Moreover, correlations between glycated albumin, Glycated hemoglobin and the duration of dialysis. The relation between GA and microalbuminuria also assessed between the groups . It was found that these ratios varied significantly with the increase in GA levels in ESRD patients.

**Key words:** Glycated albumin, ESRD, haemodiaysis, Macroalbuminuria