

## Detection of Microalbuminuria by Rocket Electrophoresis in Patients Suffering from Diabetes Mellitus with Soft Tissue Infections

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### Abstract

**Background:** Diabetes Mellitus is an important public health problem because of their health, social and economic consequences. Diabetes progressively leads to many systemic abnormalities including diabetic nephropathy which initially causes microalbuminuria. High risk patients such as cases with recurrent infections can be screened by detecting microalbuminuria. Various methods are available for detection of microalbuminuria and we have tried rocket electrophoresis for detection of microalbuminuria in diabetic patients with soft tissue infections. **Material and Methods:** A total of 305 Diabetes Mellitus patients without associated complications but with or without soft tissue infections were recruited for the study. Microalbuminuria was detected in these patients by Rocket Electrophoresis using the locally raised antialbumin antibodies. Rocket electrophoresis was done according to the technique described by Laurell CB, (1966). Height of rocket (in mm) was plotted on Y axis and corresponding albumin concentration on X – axis. **Results:** Microalbuminuria was observed in 70 cases out of whom 45(64.28%) were on oral therapy and 25(35.72%) were on insulin therapy. 38(54.28%) were hyperglycemic and 44(62.85%) were hypertensive. 55(78.57%) microalbuminuric patients had duration of illness above 5 years. **Conclusion:** Microalbuminuria is not uncommon feature of diabetes mellitus. It is commonly seen in raised blood sugar, raised blood pressure and mores with increased duration of diabetes. The method of rocket electrophoresis used in the study is simple, rapid, economical and feasible. Routine screening of patients of diabetes for microalbuminuria especially in presence of associated factor is recommended.