

## Summary and Conclusions

- Patients with MM represent with signs and symptoms involving multiple organ system; therefore, through understanding of disease process will help guide physical examination and laboratory evaluation.
- Extensive study of serum proteins provides a clear idea of protein changes in malignancy. It is evident from this study that expression of proteins varies in cancer as cell behavior deviated from it's normal functioning.
- In this study different techniques have been used for profiling. Out of which agarose gel electrophoresis is an established and routinely used technique for detection of Multiple Myeloma.
- For diagnosis of the disease clinician proceeds in certain definite algorithm. Based on clinical symptoms patient is suggested to serum protein electrophoresis. Presence of M band and then characterization of M band by Immunoelectrophoresis (Kappa and lambda ratio) gives us an idea about disease.
- In this study by using SDS PAGE we have tried to find kappa lambda ratio. Further extensive study may prove it to be a better approach. Heavy chains and light chain ratio is helpful for discriminate between heavy chain disease and light chain disease.
- Continuations of this study with proteomic approach will provide us useful information and better understanding of objectives, taken into consideration.
- The study analysed the differential expression of various serum proteins using different electrophoretic techniques. In furtherance to this study, the proteomic approach will help in the screening of the clinically significant, circulating protein based biomarkers for efficient prognosis and diagnosis of Multiple Myeloma.