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## 24 hours Ambulatory blood pressure (ABPM) monitoring characteristics and correlation with hemodialysis blood pressures measures

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**Background:** Interdialytic 24 hr ABPM is considered as a gold standard method to assess hypertension in dialysis population; however, practical challenges preclude from obtaining meaningful information. ABPM is suggested as the best method to estimate BP for its better reproducibility, and a better estimate of the 'true BP load' to which a patient is subjected.

**Aims & Objective:** To study the role of Ambulatory Blood Pressure Monitoring in management of Hypertension in patients with Chronic Kidney Disease (CKD) undergoing regular hemodialysis. To study the co-relation between intradialytic blood pressure with Ambulatory Blood Pressure Monitoring.

**Methods:** This was a observational study of CKD patients undergoing hemodialysis with ambulatory blood pressure monitoring. Total 100 patients were included in study. It included all patients of chronic kidney disease (CKD) undergoing hemodialysis a) Age more than 18 years, b) H. D. vintage > 30 days, c) Ability to consent, d) Patients who had achieved stable dry weight for atleast 2 weeks. Patients of Acute Kidney Injury & Unusual complications of dialysis ( chills & rigors, bleeding) were excluded from study. Patients on twice a week hemodialysis were selected and out of 2 sessions, 1 session was used for ABPM monitoring with its variables as mean day time blood pressure, mean nocturnal blood pressure & average 24 hour blood pressure. Continuous variables were described as mean +/- standard deviation or median +/- interquartile. Linear regression was done to determine the association and correlation of ABPM monitoring with intradialytic hypertension. (p value <0.005 statistically significant). Dipping Pattern was defined as the difference of mean BP (%) between awake and sleep period. Normal dipping was 10-20%, Non Dipping 0-10% & Reverse Dipping <0%.

**Results:** Mean systolic pre-HD BP was 139.62  $\pm$  15.34, Post-HD BP : 142.75  $\pm$  19.88, whereas Mean Systolic ABP : 138.53  $\pm$  15.34. Mean Diastolic pre-HD BP was 83.86  $\pm$  9.81, Post-HD BP : 83.63  $\pm$  8.13 & Mean Diastolic ABP was 84.16  $\pm$  11.07. Mean systolic pre- and post- HD BP was higher than mean systolic ABP . Mean diastolic Pre-HD & Post-HD BP was lower than mean diastolic ABP. ABPM showed 68% of HD patients were non-dippers and only 13% were dippers and 16% were reverse dippers.

**Conclusion:** Pre- or post- dialysis BP do not correlates with mean ABP (p 0.0642, p 0.0834). Pre HD systolic and Post HD systolic BP are higher than mean ABP. Only about 13% patients on dialysis have normal dipping pattern.

Keyword: Chronic Kidney Disease (CKD), Ambulatory Blood Pressure Monitoring (ABPM), Hemodialysis (HD).

## **Biography**

Pratik shete has experience in the field of Nephrology and completed his educatiopn in D Y Patil Medical college, India

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