HOME BLOOD PRESSURE IN KIDNEY TRANSPLANT RECIPIENTS (KTR)-Validity of different schedules of self-monitoring

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AIM: Office blood pressure (OBP), 24-h ambulatory monitoring (ABPM) and home self-monitoring (HBP) allow assessing BP control in treated HT patients. For HBP, ESH guidelines recommend 7 days of measurements but that duration is questioned. The present study analyzed the agreement between daytime ABP and different schedules for HBP in 70 treated hypertensive KTR.

METHOD: BP control defined by OBP <140/90 and daytime ABP or HBP <135/85 mmHg was tested in 70 KTR (mean age 56 ± 11 y; mean graft survival 7 ± 6.6 y). OBP and HBP were measured with an Omron M6 and 24-h ABPM with a Spacelabs 90207. HBP was measured on consecutive days (2 times in morning and 2 times at evening/day), the first day was discarded for the mean calculation. Agreement between daytime and HBP was studied when HBP was measured during 7, 5 or 3 days.

RESULTS: BP was uncontrolled in 50% of the KTR based on OBP, in 61 % according to daytime ABP and even in 64 % with HBP. Sensitivity (Se) testing agreement between daytime ABP and HBP decreased progressively when number of days was shortened: the highest Se was observed for a 7 days duration with 1st day discarded (86 %).

Specificity (Sp) fluctuated around 70 % and was the highest for a 5 (73 %) and 3 days schedule. However the 5 days schedule had higher Se (83 %) than the 3 days. Proportions of KTR correctly classified according to daytime ABP were 79 %, 79 % and 78 % with the 7, 5 or 3 days schedule, respectively.

CONCLUSIONS: HBP, easier and less restricting method than 24h ABPM, is a good alternative to daytime ABPM as nearly 80 % of treated KTR were similarly classified. HBP recording period can be shortened to 5 days according to Se and Sp. A 3 days schedule seems more risky reducing the chance to identify masked HT due to a decreased drug adherence.