

Reproducibility of blood pressure (BP) measurement techniques in late kidney transplantation (KT): the EPARA study

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Introduction: There has been a long debate about appropriate BP measurement techniques for evaluating the quality of BP control, especially in KT. Thus, one aim of the present study was to examine 3 methods of BP measurement and their reproducibility over a short period of 8 weeks.

Methodology and population: BP was measured several times in clinical office (OBPM), but also during 24 hour ambulatory BP monitoring (ABPM, Spacelabs 90207) and by home BP monitoring (HBPM, OMRON M6 for 7 days), all according to recommendations, in 78 KT patients (mean age 56y, 46 men, 8y of T, 70 treated by antihypertensive drugs), of whom 56 patients were examined again 8 weeks later.

Results: HBPM better agreed with the diagnosis of arterial hypertension obtained by the gold standard (daytime ABPM) than OBPM. Furthermore, the reproducibility over time could significantly be improved by using ABPM and HBPM in comparison to OBPM. Classification of BP according to clinic and out-of-clinic BP levels changed between the 2 visits, with only little persistence of masked hypertension or white-coat hypertension in contrast to sustained hypertension and normotension.

Conclusion: HBPM and ABPM should be applied more often also in KT, among others for reasons of better reproducibility over time than OBPM.