

P15 Reference Intervals of 24-hour Central Blood Pressure Assessed with an Oscillometric Device in Healthy Children and Adolescents

Igor Posokhov^{1,*}, Alexandr Sharykin², Inna Trunina²

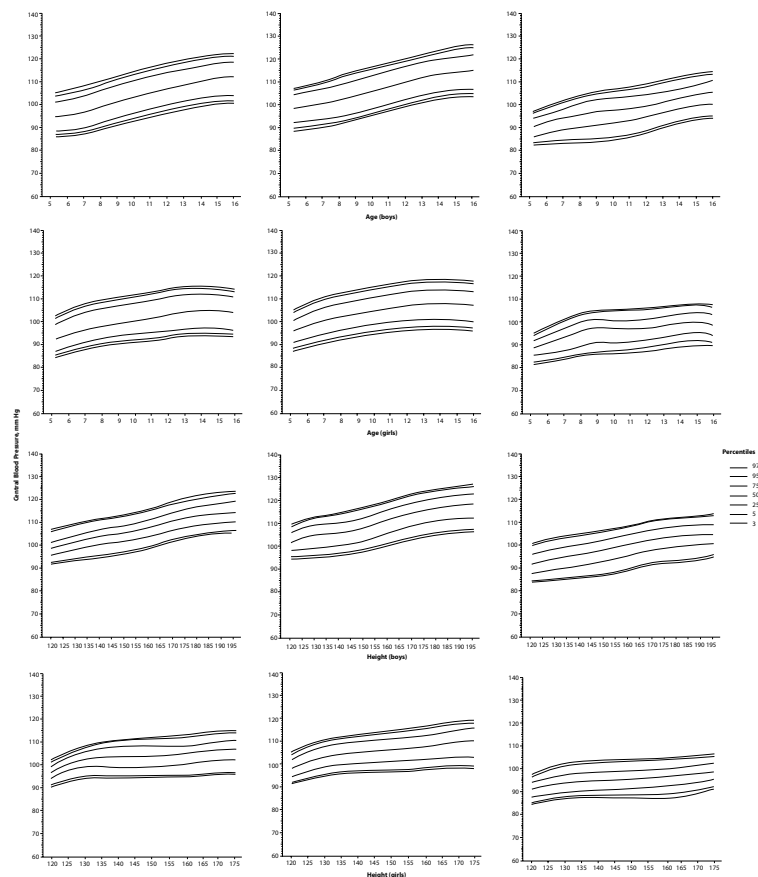
¹Hemodynamic Laboratory Ltd, Nizhny Novgorod, Russia

²Pirogov Russian National Research Medical University, Moscow, Russia

ABSTRACT

Reference intervals (RI) of 24-h central blood pressure (24CBP) obtained from large healthy population are lacking in Russia. We had to generate 24CBP percentile curves and RI adjusted to each level of age and/or body height and gender of each time of monitoring (24-h, daytime or nighttime). Our database consisted of ABPM files received by the BPLab device (Petr Telegin, Russia). First, we selected ABPM files that corresponded to the normal ambulatory BP according to 2016 European guidelines [1] from our database. Second, we have excluded files that indicate antihypertensive treatment, elevated BMI and any disease in extended BPLab-diary. Third, age specific percentiles curves were generated with LMS Chartmaker Pro (UK). RI of 24CBP ($n = 1085$) are shown in Figure 1 (image 1). Day-time values of the CBP were higher than those obtained by other oscillometric devices in office conditions [2,3]. This can be explained by the known fact of higher values of BP in ABPM compared with office measurements in the children and adolescents.

Conclusion: We have obtained RI of 24CBP for youth that can be used in routine practice.



*Corresponding author. Email: igor@posokhov.ru

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