Method for assessing and monitoring central aortic pressure, which at the amplitude calibration stage involves measuring systolic pressure $SAP_{br.calibr}$ and diastolic pressure $DAP_{br.calibr}$ in the brachial artery using a compression cuff, synchronous recording of rheograms of the brachial artery and aorta, construction of averaged periods of rheograms, high-frequency components and first harmonics of rheograms, including amplitude calibration of rheograms based on the equality of mean pressures in the brachial artery $P_{mean.br.calibr}$ and aorta $P_{mean.A.calibr}$ and the equality of the amplitudes of their first harmonics, based on the measured values of the maximum and minimum amplitudes of the variable components of the averaged rheograms of the brachial artery and aorta $\Delta R_{max.br.calibr}$, $\Delta R_{min.br.calibr}$, $\Delta R_{max.A.calibr}$, $\Delta R_{min.A.calibr}$, and the amplitudes of their first harmonics $\Delta RI_{harm.br.calibr}$, $\Delta RI_{harm.A.calibr}$, involves determining aortic pressures over the amplitude calibration time interval according to the following relationships:

$P_{mean.br.calibr} = P_{mean.A.calibr}$;

$P_{mean.A.calibr} = DAP_{br.calibr} - K_1 \cdot \Delta R_{min.br.calibr}$;

$SAP_{A.calibr} = K_1 \cdot K_2 \cdot \Delta R_{max.A.calibr} + P_{mean.A.calibr}$;

$DAP_{A.calibr} = K1 \cdot K2 \cdot \Delta R_{min.A.calibr} + P_{mean.A.calibr}$,

where: $K1=(SAP_{br.calibr}-DAP_{br.calibr})/(\Delta R_{max.br.calibr}-\Delta R_{min.br.calibr})$,

$K2=\Delta RI_{harm.br.calibr}/\Delta RI_{harm.A.calibr}$.

Throughout the study, the baseline aortic lead resistance (R_{brA}) is also recorded. After the end of the amplitude calibration time interval for the brachium and aortic rheograms, without interrupting the recording of the aortic rheogram and the baseline aortic lead resistance (R_{brA}), the compression cuff and rheographic electrodes are removed from the brachium, and during the subsequent time interval of aortic pressure monitoring, only the aortic rheogram and the baseline aortic lead resistance Ri_{brAmon} are recorded, at the required time segments of the aortic pressure monitoring interval I_{mon}, averaged periods of the aortic rheogram are constructed, the maximum and minimum amplitudes of the variable components of the averaged aortic rheograms $\Delta Ri_{max.A.mon}$ and $\Delta Ri_{min.A.mon}$, the averaged values of the baseline aortic resistance $R_{brA.calibr}$ in the calibration segment and $Ri_{brA.mon}$ in the time segments of the monitoring interval, and the aortic pressures during these time intervals are determined according to the following relationships:

$\Delta R_{ibrA.mon.} = R_{ibrA.mon.} - R_{brA.calibr}$;

$P_{imean.A.mon.} = K_1 \cdot K_2 \cdot \Delta R_{ibrA.mon.} + P_{mean.A.calibr}$;

$SAP_{iA.mon.} = K_1 \cdot K_2 \cdot \Delta Ri_{max.A.mon.} + Pi_{mean.A.mon.}$;

$DAP_{iA.mon.} = K_1 \cdot K_2 \cdot \Delta Ri_{min.A.mon.} + Pi_{mean.A.mon.}$.