24 Hour ABPM and Arterial Pulse Wave Analysis

Key Cardiovascular Hemodynamics Now Easily Integrated With Your Practice

Mobil-O-Graph NG® ABPM

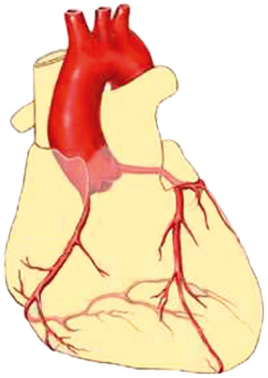
Research, development and production – Made in Germany
Powered by Austrian Research Centers GmbH

Pulse Wave Analysis and 24 hour ABPM

- Captures traditional 24 hour ABPM data *plus* pulse wave analysis (PWA) profile
- Requires no additional staffing or administration
- Simple operation and implementation

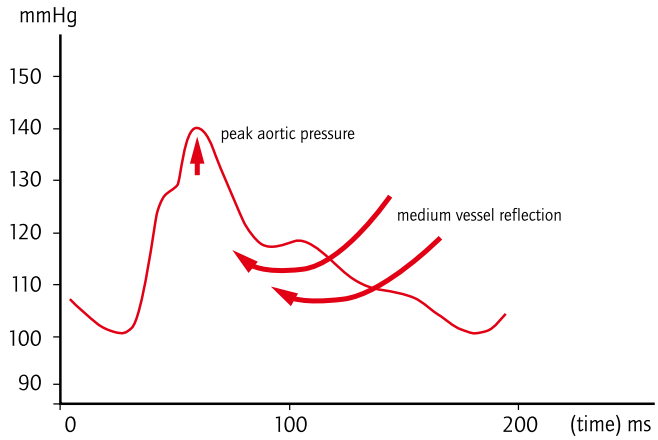
Mobil-O-Graph NG® ABPM

Recent advances in outpatient BP monitoring technology have made it possible to now capture the arterial pulse wave analysis (PWA) profile, a key variable closely reflective of large vessel vascular elasticity. For most hypertensives, the most critical change in vascular stiffness takes place in the aorta where loss of elasticity results in higher central aortic pressures/cardiac afterload and over time, diminished coronary perfusion. The end result is an increase in cardiovascular injury, chronic morbidity and mortality[1]. By capturing and analyzing the patient's aortic PWA profile, clinicians can now have a direct insight into the extent of large vessel hypertensive injury.



Increased cardiac afterload results in long term injury to coronary vessels.

The Mobil-O-Graph NG® provides both classic 24-hour ABPM data and a highly accurate aortic PWA profile. This new combined capability is a vast improvement in diagnostic accuracy and the assessment of effective BP treatment.



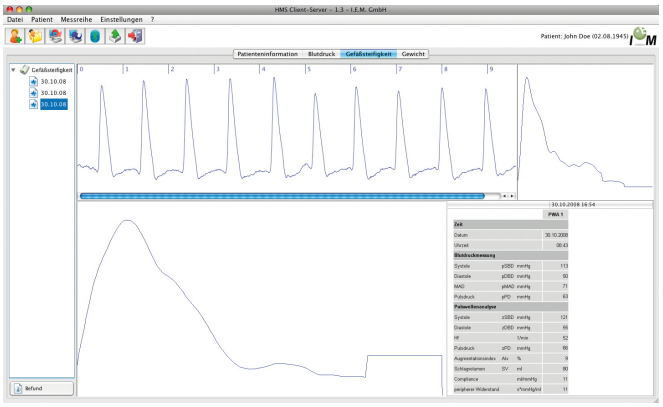
A stiffer aortic wall results in a stronger reflection of the systolic pulse wave creating higher peak aortic pressure.

The Mobil-O-Graph NG® transfers the pressure curve data wirelessly to the HMS CS analysis software which produces an accurate assessment of both the patient's BP management and total vascular condition.

[1]Williams et al. "Differential impact of blood pressure-lowering drugs on central aortic pressure and clinical outcomes: principal results of the Conduit Artery Function Evaluation (CAFE) study". **Circulation. 2006 Mar 7**;113(9):1213-25.

Pulse wave analysis is recommended by the European Society for Hypertension (**ESH**) for the following conditions:

- Isolated systolic hypertension
- Aortic insufficiency
- Hyperthyroidism
- Evaluation of anti-hypertensive therapy in relation to arterial elasticity



Typical HMS CS display of Pulse Wave Analysis Profile

Unlike other ABPM systems, the Mobil-O-Graph NG® now offers:

- A recording of the brachial pulse wave analysis profile from which to create:
  - A mathematical derivation of the aortic pulse wave analysis profile
  - Graphical and tabular presentation of BP and pulse wave profiles

Report Features

BP measurement
- Aggregated and organized BP readings
- Mean, median and std. deviation reports
- Circadian variabiltiy reports

Pulse Wave Analysis
- Simple graphical display
- Longitudinal analysis to assess the effectiveness of therapy over time

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