

Clinical Use of Pulse Wave Analysis: Proceedings From a Symposium Sponsored by North American Artery

Clinical Case Example II: Untreated Hypertensive Patient

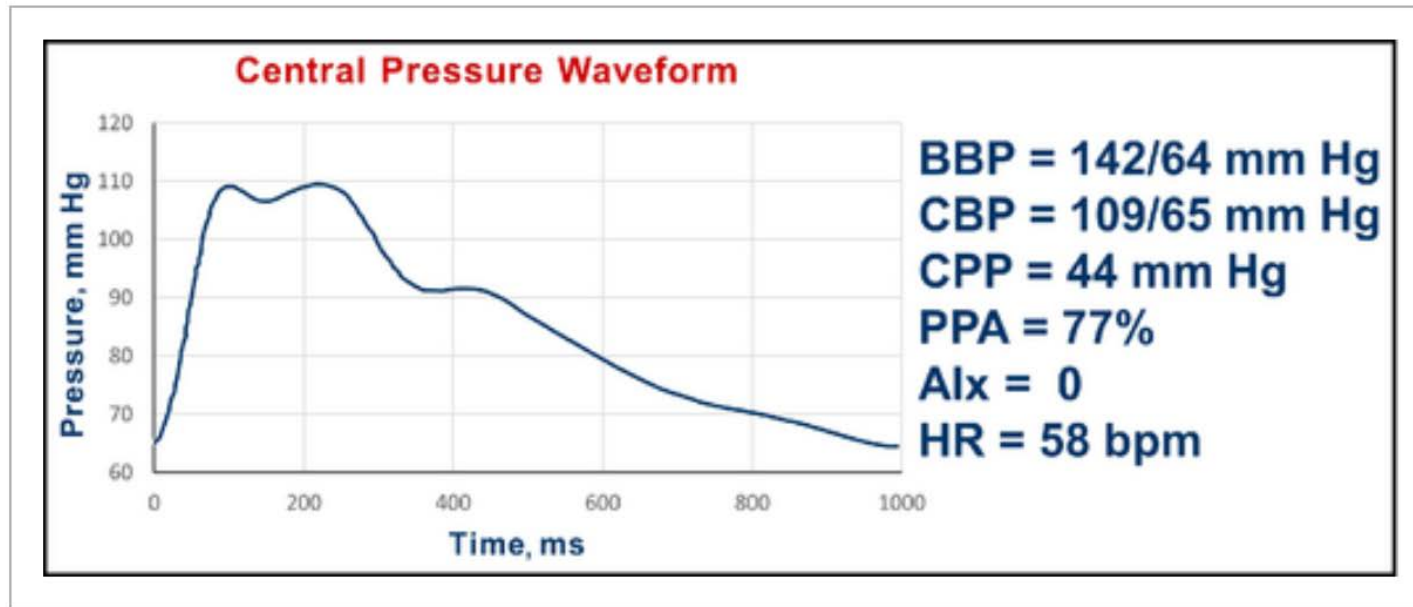
Clinical Question: Initiate Drug Therapy?

- 41-year-old sedentary man
- Office pressure of 142/64 mm Hg
- No comorbidities
- Rx: None
- Initial pulse wave analysis (PWA) results are presented in Figure 6
- 3 month follow-up PWA results are presented in Figure 7

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Clinical Case Example II

Figure 6



Interpretation:

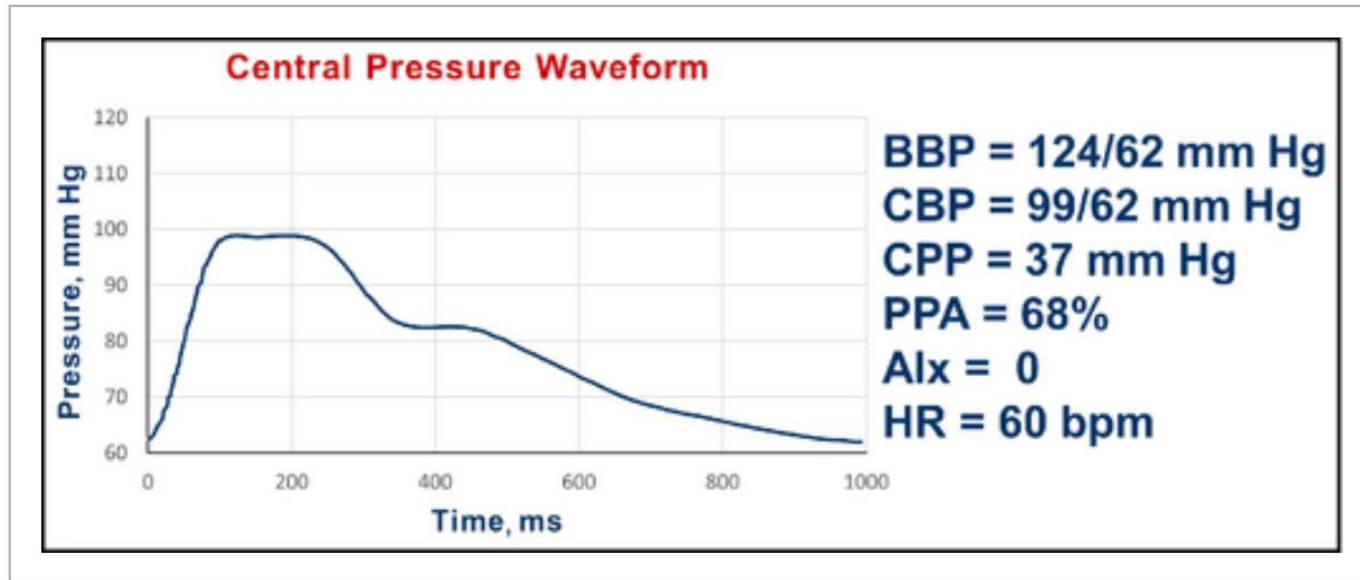
The substantial pulse pressure amplification (brachial 78 mm Hg/central 44 mm Hg; 77%) and the central systolic BP <124 mm Hg argues against drug therapy. An exercise regimen was recommended and followed.

BBP indicates brachial blood pressure systolic/diastolic; CBP, central blood pressure systolic/diastolic; CPP, central pulse pressure; Alx, augmentation index; HR, heart rate; bpm, beats per minute.

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Clinical Case Example II

Figure 7



Interpretation:

He returns 3 months later with brachial systolic pressure improvement and continued substantial pulse pressure amplification (brachial 62 mm Hg/central 37 mm Hg; 68%). No additional pharmacologic therapies were prescribed and he was encouraged to continue the exercise program.

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Clinical Case Example II

Summary:

This instance provided support for two clinical decisions. One was not to pharmacologically treat the modest brachial systolic pressure elevation. The other was to support the value of exercise, which resulted in brachial BP improvement without loss of the advantageous central pressure profile.