

# Home blood pressure monitoring deemed very useful

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By Martha Kerr

NEW YORK (Reuters Health) - For tracking heart risk, taking blood pressure readings regularly at home beats out measurements in the doctor's office, or even expensive 24-hour blood pressure monitoring with a portable recorder, according to a new study.

High blood pressure eventually leads to enlargement of the main pumping chamber of the heart, which is measured by the "left ventricular mass index" or LVMI. To see which type of blood pressure readings most closely reflected the LVMI, Dr. Thomas Pickering and colleagues at Columbia University Medical Center in New York, and the State University of New York-Stony Brook, studied data from 163 patients.

All of the subjects first underwent 24-hour ambulatory blood pressure monitoring. Three office blood pressure measurements were taken the next day, after the subjects had rested for five minutes. The participants then measured their own blood pressures at home in the morning and the evening.

They also took additional readings at home, two days per week for ten weeks.

"Only age, sex and home blood pressure monitoring were significant predictors of LVMI," the team reports in the American Journal of Hypertension. This was true only after the first 12 home measurements, meaning that accuracy increased as more readings were averaged.

People are usually willing and able to measure their blood pressure at home. "We normally recommend three readings in succession each time (about 30 seconds between readings), one set first thing in the morning, and another at night before going to bed," Pickering told Reuters Health.

"For someone just starting, we like to see readings over three days per week for two weeks. If the situation is stable ... they can be much less frequent," he advised.

However, some people become very anxious "and compulsively keep taking readings," he cautioned. "It should be stressed that there will be some high and some low readings, and that what we are interested in is the average level."

All in all, "home monitoring is the best way of looking at changes over long periods of time" and for providing information needed for medication adjustments, Pickering commented.

SOURCE: American Journal of Hypertension, May 2007.

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