Differences in office and ambulatory blood pressure levels can vary according to age

Ambulatory blood pressure is higher than office blood pressure in younger adults, the reverse of what is observed in older individuals (Conen D, Aeschbacher S, Thijs L, et al. *Hypertension* 2014; 64:1073-1079).

An international cohort study examined differences in mean daytime ambulatory blood pressure compared with blood pressure readings taken in the doctor’s surgery. Blood pressure readings from 9550 individuals who were not taking antihypertensive medication were analysed according to 10-year age categories. People under 50 years of age were found to have significantly higher daytime ambulatory blood pressure compared with office blood pressure (P<0.0001). Conversely, people over 60 years of age were found to have significantly higher office blood pressure than ambulatory blood pressure (P<0.0001). The prevalence of white coat hypertension increased with age, and was observed in 2.2% of people aged 18-30 years compared with 19.5% of people aged ≥70 years (P=0.0003). These findings demonstrate that office blood pressure measurement is not sufficient to accurately diagnose hypertension, particularly in younger adults, and that ambulatory blood pressure monitoring can aid in correct hypertension diagnosis.