

Visualizing and Predicting Heart Diseases with an Interactive Dash Board

BP Variation With Respect To Age

With short- and long-term fluctuations resulting from complex interactions among behavioural, environmental, neural central, or reflex influences, as well as other potential contributing factors, blood pressure variability has been considered a physiological marker of autonomic nervous system control.

Because of their low repeatability, interdependence, and correlation with blood pressure level, current indices of blood pressure variability present methodological questions. The prognostic importance of blood pressure variability is still debatable in addition to methodological issues. According to some studies, blood pressure variability is associated with end-organ damage (Parati et al., 1987a), cardiovascular events (Kikuya et al., 2000; Rothwell et al., 2010a,b; Rothwell, 2010; Webb et al., 2010; Johansson et al., 2012; Shimbo et al., 2012), mortality (Muntner et al., 2011), or mortality is associated with (Pierdomenico et al., 2006; Hansen et al., 2010; Schutte et al., 2012).

Target organ harm from increased BP variability includes endothelial dysfunction, vascular and cardiac hypertrophy, illness, and cerebral injury. A decreased BP variability may be another characteristic of CCBs that contributes to their known efficacy in avoiding CV events. Different BP variabilities, both appearing in ASCOT, are obviously challenging to distinguish, even with sophisticated statistical modifications. It would be ideal to examine each piece of information from trials contrasting CCBs with a placebo and other drugs.

The baroreflex and chemoreflex-mediated cardiovascular and autonomic processes are continuously modulated by central command. 33,34 For BP fluctuation during sleep and daytime activity, this regulation is crucial. A number of cortical and subcortical brain areas have direct neuronal connections to the brainstem's autonomic centres, which modulate those centres' operations.

