**GEOGRAPHIC VARIATIONS IN PATIENTS RECEIVING PERMANENT PACEMAKERS- DO INDIANS AGE EARLIER?**

**U.N. Srivatsa1**, S. Sola2, B. Barooah2, B. Hoppe3

1UC Davis, CA, USA, 2SSSIHMS, Bengaluru, India, 3North Memorial Heart and Vascular Institute, Robbinsdale, MN, USA

Patients presenting to our center for symptomatic bradycardia (SB) were young than hence we attempted to find potential cause from medical records. Data collected include: geography, age, gender, laboratory, EKG, tuberculosis (TB) status, family history. We compared SB patients who received pacemaker (PP) from West Bengal (PPWB) to those with CAD from WB (CADWB), PPWB to those outside West Bengal (nWB); Indians to those in USA (USAP) treated in 2011. We excluded patients known congenital heart block (HB) and other secondary causes. Chi square test and t test were used to compare proportions and mean respectively using STATA 10, with significance level < 0.05.Patients (n=83, age 46 + 11 yrs, 49.3% females, mean LVEF 63 + 5.7%, hypertension-27.7%; diabetes-9.6%) presented for PP. Diagnosis was HB in 63.9%, and sick sinus syndrome (SSS) in 36.1%. Mean duration of symptoms were 16 + 23 months. Patients from WB (57.8%), did not differ from nWB in age, gender, LVEF, hypertension (HTN), diabetes (DM), WBC count, ESR or hemoglobin. The geographic distribution of WB patients with SB and CAD are similar ruling out local toxic factors. When compared to USAP (n=43), Indians were younger 47 +11 vs 77 + 10 yrs (p<0.0001), had less SSS 36 % vs 73% (p=0.0001) and less HTN 32 % vs 78% (p<0.0001), which remained significant after adjustment for age. Indians presenting for PP placement are younger with higher proportion of HB. The younger presentation is not related to known medical and geographical factors and needs further investigation.