SUMMARY

Background: Supraventricular tachyarrhythmias are arrhythmias which originate from above the ventricles (SAN, atria, and AVN). They occur in a setting of cardiac and non-cardiac diseases. Their varied presentations and complications which range from strokes and syncope to sudden cardiac death make early recognition, diagnosis and prompt treatment imperative. For any meaningful intervention, the burden of the disease must be known. The aim of this study was:

1. to determine the frequency and types of SVT as well as the cardiac and non-cardiac diseases associated with them.
2. to study electrolyte status and determine their effect on occurrence of SVT.
3. to determine the effect of SVT on outcome of admission.

Methods: The study took place from December 2001 to April 2003. It was extended to the month of April to make up for the four months of residents’ doctors industrial action. 410 subjects (197 females and 213 males) were recruited into two groups of 205 each. The first group was made up of Cardiac patients while the second group served as age-matched control. A semi-structured questionnaire was administered to the subjects. These questionnaires highlighted their socio-demographic data as well as drugs the subjects were currently taking which may affect heart rhythm. ECG tracings were done and echocardiography requested for when deemed necessary. Serum sodium and potassium levels were determined.
Results: The prevalence of SVT was found to be 6.34%. Out of this, Atrial fibrillation had the highest frequency with a prevalence of 3.90%; Atrial flutter had a prevalence of 1.95% followed by Paroxysmal atrial tachycardia with a prevalence of 0.48%. Females and the elderly tended to have a higher prevalence SVT. The cardiac disorders associated were, IHD, Rheumatic heart disease, EMF and DCM; HBP, Cor pulmonale and Pericardial disease were not common. Arrhythmogenic factors were right and left atrial enlargement, LVH, myocardial infarction as well as prolonged QT interval. Aneurismal dilatation of the right atrium was significant out of all these. Other associations were use of Cardiac stimulants like tea and kola nut. Obesity was also found to be contributory to increased incidence of SVT. SVT were found to occur in a setting of normokalaemia as well as normonatraemia. The various outcomes of admission studied were the responded/discharged rate; the rate of thromboembolic phenomena; the rate of leaving the hospital before proper discharge and the death rate. Atrial flutter seemed to have the best overall outcome followed by Atrial fibrillation with PAT being the least. The study also found that the presence of SVT worsened morbidity and mortality in the setting of Cardiac disease and recommended early diagnosis and prompt intervention.

CONCLUSION: SVT is common in our environment and clinicians are encouraged to be observant and give prompt treatment to avert the various complications that may arise because in the event of these complications occurring, the disease burden rises both for the individual and the society at large.