Dr. Adrian Baranchuk

Queen’s University –
Link to Queen’s profile at http://deptmed.queensu.ca/faculty/adrian_baranchuk
HDH Department – Medicine

Fields of Specialization:
Cardiology – Clinical Electrophysiology
Keywords: atrial fibrillation, sleep apnea, cardiac arrhythmias, conduction disorders, clinical electrophysiology

Current Research Projects:

- Sleep apnea as a predictor of post-CABG atrial fibrillation
- Impact of Sleep Apnea on human atrial tissue: ionic remodeling
- Atrial histological changes in patients with Sleep Apnea
- Interatrial block as predictor of atrial fibrillation in patients with ventricular non-compacted cardiomyopathy
- Impact of Bevacizumab on the autonomic nervous system
- Incidence of new atrial fibrillation in patients with severe sleep apnea: the Reveal XT-Study

Research Story
Dr. Adrian Baranchuk’s research involves patients from his Hotel Dieu Hospital (HDH) arrhythmia clinics. In one study, Dr. Baranchuk is investigating the impact of the anti-cancer drug Bevacizumab on the autonomic nervous system. Although commonly used in cancer treatment, this drug appears to have negative cardiac effects, secondary to its tendency to cause a general imbalance in the autonomic nervous system (ANS). Subjects are tested for biological markers of this imbalance at Kingston General Hospital (KGH). This study allows the risks and benefits of Bevacizumab in cancer treatment to be evaluated, and potential interventions to be planned for patients with this ANS imbalance.

In another study involving patients from his HDH arrhythmia clinics, Dr. Baranchuk is investigating the incidence of new atrial fibrillation in patients with severe sleep apnea (the Reveal XT-Study). Approximately three years after the implantation of a Loop Recorder (cardiac event monitor), patients may develop atrial fibrillation which can increase the risk of stroke. This study will allow patients with
severe sleep apnea who develop atrial fibrillation (a cardiac arrhythmia of the upper chambers of the heart) to access timely prevention of stroke by receiving proper anticoagulation (blood thinners).

A joint grant from the HDH/KGH Cardiology Division has been helpful in supporting Dr. Baranchuk’s research. Dr. Baranchuk concludes, “HDH serves the Kingston community by offering multiple ambulatory clinics in different sub-specialities. The Heart Rhythm Clinic, that operates twice a week, allows us to take care of multiple patients with different conditions. At the same time, it gives us the opportunity to offer patients participation in research initiatives that contribute to the growing body of evidence that allows us to practice evidence-based medicine. In addition, HDH offers a great scenario for medicine trainees to be involved in patient care in a supervised and comfortable environment as well as to actively participate in research activities.”

Selected Publications: