Temporal Trends and Patient Characteristics associated with Drug Utilization after Incident Stroke from 2010 to 2014

Medical professional organizations such as the American Heart Association (AHA), American Stroke Association (ASA) and American College of Cardiology (ACC) have published evidence-based clinical practice guidelines that recommend use of pharmacotherapy to improve stroke care and health-associated outcomes. Three medication classes, namely thrombolytic agents, anti-thrombotics and statins, are recommended for the acute management and secondary prevention of ischemic stroke. However, these medications are not generally recommended in hemorrhagic stroke unless specifically indicated for other comorbidities.

Although development of guidelines is useful for stroke management, merely introducing them does not ensure guideline adherence during prescribing or improvement of outcomes. Recommendations on medication prescribing should be incorporated in a quality-assurance cycle with feedback from studies that measure drug use in the real world. Although there have been studies performed in Western countries examining drug utilization patterns in stroke, research in a multi-ethnic Asian setting is lacking.

In this seminar, we will examine the temporal trends in prescription of thrombolytic agents, anti-thrombotics and statins among incident stroke patients admitted to two Singapore tertiary hospitals between 2010 and 2014, using a chronic disease registry. In addition, patient characteristics associated with drug utilization will be explored.

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