CONTEMPORARY SEASONAL VARIATIONS IN TRANSIENT ISCHEMIC ATTACK HOSPITALIZATIONS IN THE UNITED STATES: AN UPDATE ON THE EXISTING LITERATURE

ZABEEN MAHUWALA, MD [1]

[1]Department of Neurology, University of Kentucky

Abstracts will be considered for both poster and platform presentations

Stroke/Neurovascular

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Authors: Zabeen Mahuwala, Chintan Rupareliya, Rupak Desai, Krupa Patel, Dipen Zalavadia Smit Patel, Tariq Siddiqui, Daniyal Zahid, Kriti Agarwal, Neel Patel

Background
Transient ischemic attack (TIA) has been acknowledged as a major predictor of following stroke. The data on contemporary seasonal trends in TIA hospitalizations in the United States (US) is limited with inconclusive data from other countries.
Objective
Our objective was to explore the TIA-related admissions and mortality trends using largest inpatient database in the US from 2010-2014.
Methods
Using the National Inpatient Sample (NIS), and the appropriate International Classification of Diseases Ninth Clinical Modification 9 (ICD-9) CM codes, we analyzed contemporary seasonal trends in hospitalization for TIA from 2010-2014. Discharge weights were applied to achieve national estimates
Results
We recognized 1,150,408 weighted TIA admissions in the US through 2010-2014. We analyzed average monthly TIA related admissions and hospital mortality per season over the span of 5 years (Figure 1). Maximum monthly admissions were observed during spring (N=18926) followed by summer (N=18408), winter (N=18040) and autumn (N=17574).
In-hospital mortality was documented higher during winter (N=629) and spring (N=610). In-hospital mortality was documented less during the months of autumn (N=560) and summer (N=535).
Conclusions
Spring and summer months witnessed highest TIA-related admissions, whereas winter and spring months documented highest case-fatality rate. Further well-designed prospective studies are warranted to comprehend the mechanism of seasonal variations affecting TIA hospitalizations and mortality in order to make preventive strokes to reduce future stroke occurrence in such high risk population.

References Cowperthwaite, M. C., & Burnett, M. G. (2011). An analysis of admissions from 155 United States hospitals to determine the influence of weather on stroke incidence. Journal of Clinical Neuroscience, 18(5), 618-623.