## The Incidence of Acetylcholine Receptor Antibody Positive Myasthenia Gravis in South Africa

Authors: Mombaur Busisiwe, Lesosky Maia, Liebenberg Lisa, Heckmann Jeannine

**Abstract :** Introduction: To assess age- and gender-specific incidence rates (IR) of acetylcholine receptor (AChR)-antibody positive myasthenia gravis (MG) in South Africa, and geographical variation in incidence. Methods: IRs were calculated from positive AChR antibody laboratory data between 2011 and 2012, using 2011 population census data. Results:890 individuals were seropositive, for an annual IR of 8.5 per million. Age-standardized IR for early- (< 50) and late-onset ( $\ge$  50) MG were 4.1 and 24 per million, respectively, and for juveniles, 4.3 per million. The IR between provinces ranged from 1 to 19 per million. Conclusions: In this Southern hemisphere African population, the overall IR and peak IR (in older men) for seropositive MG is comparable to that in Europe and North America, arguing against environmental factors. However, IRs may be higher among children with African genetic ancestry. Geographical variation in incidence underscores the importance of outreach programs for regions with limited resources.

Keywords: incidence rates (IR), acetylcholine receptor (AChR), myasthenia gravis (MG), South Africa

Conference Title: ICNE 2015: International Conference on Neurology and Epidemiology

**Conference Location :** London, United Kingdom **Conference Dates :** February 16-17, 2015