

FA06.04: Incidence of achalasia in South Australia: a cohort study based on esophageal manometry

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Background: Achalasia is a disorder of esophageal motility with a reported incidence of 0.5-1.6 per 100,000 population per year in Europe, Asia, Canada and America. Prior studies of incidence are predominantly derived from retrospective searches of databases of hospital discharge codes and personal communications with gastroenterologists and are likely to be incorrect.

Methods: The cohort was defined as the South Australian population using data obtained from the Australian Bureau of Statistics. Cases of achalasia diagnosed by esophageal manometry were identified from the three adult manometry laboratory prospective databases in South Australia. Endoscopy reports and case notes were reviewed to correlate with clinical diagnosis. The annual incidence of achalasia in the South Australian population was calculated for the decade 2004 to 2013. Age-standardization to the European Standard Population was performed.

Results: The annual incidence of achalasia in South Australia was 2.3 to 2.8 per 100,000 population. The mean age at diagnosis was 62.1 ± 18.1 (SD) years. The incidence of achalasia increased with age (Spearman rho = 0.95, P < 0.01). The age-standardized incidence was 2.1 (CI 1.8 - 2.3) to 2.5 (CI 2.2 - 2.7).

Discussion: This study reports what we believe to be the highest and most accurate incidence of achalasia to date. The unique situation in South Australia of relative geographic isolation and ready access to manometry has allowed the accurate identification of cases from manometry laboratories rather than hospital coding, with a low probability of missed cases.

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