

Clinical Genetics

AB018. Hospitalization of adults with Down syndrome: lesson from a 10-year experience from a community hospital

Jirat Chenbhanich, Thomas Treadwell

Department of Internal Medicine, Metrowest Medical Center, Framingham, Massachusetts, USA

Background: Down syndrome is the most common genetic cause of intellectual disability. Life expectancy of patients with Down syndrome has improved significantly over the past decade. However, there is a sparse evidence of comorbidity and hospitalization of adult patients with Down syndrome.

Methods: Medical records of 81 hospital admissions of 37 Down syndrome patients aged 21–68 years at Metrowest Medical Center during the year of 2007–2017 were analyzed.

Results: The adult patients with Down syndrome had mean age at admission of 48.6 ± 8.8 years with the mean length of stay of 3.89 ± 3.79 days. Male patients were hospitalized longer than female patients (mean 4.9 vs. 3.9 days; $P < 0.05$). The patients who lived at home with support

were admitted at earlier age than those who came from health care facility (mean age 41.5 vs. 52.2 years; $P < 0.001$). Most common causes for hospitalization were pneumonia/aspiration (29.5%), gastrointestinal problems (16.0%), and seizure (11.1%). Most common comorbidities were gastroesophageal reflux disease/dysphagia (GERD/D; 70.3%), psychiatric problems (62.2%), and hypothyroidism (56.8%). The presence of GERD/D or seizure disorder was significantly associated with recurrent hospitalizations and re-admission within one month ($P < 0.05$). Mortality rate was 4.9% and rate of intensive care unit admission was 8.6%.

Conclusions: Care of adult patients with Down syndrome demonstrates challenges in internal medicine and signifies the importance of multidisciplinary approach. For better care of this patient population, we propose that comorbidities during adulthood of Down syndrome, particularly GERD/D and seizure disorder should be warranted and optimally treated especially during hospitalization.

Keywords: Hospitalization; Down syndrome; trisomy 21; epidemiology

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