

LETTER

No difference in emergency department visits before and after transition for coeliac disease

In a recent consensus document, we and others presented recommendations for the transition of care from childhood to adulthood in coeliac disease (CD).¹ Models of care transition share a goal of prevention of medical care lapses. Lower continuity of general paediatric care has been associated with greater risk of emergency department (ED) visits and hospitalisation.² Yet patient vulnerability during and immediately following transition may be under-recognised. Poorer medical adherence has been noted for young adults with chronic illnesses during their transition to adult care.³⁻⁴ In a US study, ED visits comprised over 20% of the medical care of young adults, a significantly greater proportion than in other age groups.⁵ Young adults with sickle cell disease in the midst of transition to adult care had more ED visits when compared with those with stable paediatric care or who were able to successfully establish adult care.⁶

To assess the transition burden on young adults with CD, we examined ED visits as a marker of transition difficulty before and after the age of 18 years. We used a cohort of individuals with CD according to small intestinal biopsy reports (Marsh III), which has been described previously and consists of 29 096 individuals with CD and 144 522 matched controls.⁷ Through linkage with the Swedish Inpatient Register⁸ (completed in 1987), we compared the number of ED visits resulting in hospital admission during ages 16–17 years vs 19–20 years in the same individuals diagnosed with CD <14 years of age in 1985 or later, who remained alive beyond age 20 years. We excluded those aged 18 years since some patients in Sweden will stay with their paediatrician until the age of 19. Some 2901 individuals with CD (1813 females and 1088 males) fulfilled these criteria. We also examined 14 345 matched controls (8933 females and 5412 males). We used Poisson regression with number of ED visits for each period as our outcome measure. Each individual was only compared with him/herself to adjust for inpatient confounding. We used

a cluster-robust SE estimator of variance (sandwich estimator). Statistics were calculated using SPSS V23 and Stata V13.

Among the 14 345 controls, 223 had at least one emergency visit (1.6%) before transition compared with 244 (1.7%) after (maximum of four visits before and after). Comparing the number of visits, there was no difference in incidence rate ratio (IRR) after transition (1.18; 95% CI 0.97 to 1.43). Restricting our data to males, the IRR was 1.08 (95% CI 0.79 to 1.47). In patients with CD, 11/2901 (0.3%) had at least one emergency visit before transition compared with 14 (0.5%) after (number of ED visits ranged between 0 and 10). Adulthood was not associated with an increased risk of ED visits (IRR=2.08; 95% CI 0.73 to 5.96). Excluding one individual with CD with 10 ED visits from the analysis, the IRR decreased to 1.25 (95% CI 0.54 to 2.88).

Our data do not support increased ED utilisation among young adults with CD. This may reflect adequate provision for transition of care for those young people with CD in Sweden. However, a major limitation is that data on ED visits were restricted to those leading to hospital admission. The Swedish healthcare system and access may also be considerably different from other systems limiting applicability to these other systems. Lastly, patients with CD may not see utility in ED visits as symptoms may be chronic and patients not perceive any benefit in ED visits as they are aware that prescriptions are not typically required in CD. A lack of need for emergency care may therefore mirror poor CD transition rates for these same reasons, marking the importance of a strategic plan to facilitate transition among young adults with CD.

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