Abstract

OBJECTIVES: To determine the prevalence of coeliac disease in an Australian rural community.

DESIGN: Retrospective analysis of stored serum samples from 3,011 random subjects from the Busselton Health Study. IgA antiendomysial antibodies (AEA) were detected by indirect immunofluorescence, and subjects testing positive were contacted and offered small-bowel biopsy.

MAIN OUTCOME MEASURES: Prevalence of AEA positivity and biopsy-proven coeliac disease in the community with reference to the proportion of symptomatic to asymptomatic patients.

RESULTS: 10 of 3,011 subjects were AEA positive. One subject had died, one subject could not be traced and one refused small-bowel biopsy. All subjects with detectable AEA who consented to biopsy had pathological changes consistent with coeliac disease. The prevalence of newly diagnosed biopsy-proven coeliac disease is 7 in 3,011 (1 in 430). Two further subjects had a diagnosis of coeliac disease before this study. When all AEA-positive patients and those previously diagnosed are included, the prevalence is 12/3,011 (1 in 251). There was a significant clustering of cases in the 30-50-years age range, with 10/12 (83%; 95% CI, 52%-98%) aged between 30 and 50 years, compared with 1,092/3,011 (36%; 95% CI, 35%-38%) of the total population (P<0.03). Of the eight AEA-positive subjects who could be contacted, four had symptoms consistent with coeliac disease and four were asymptomatic. Three subjects were iron-deficient, four subjects had first-degree relatives with coeliac disease and one subject had type 1 diabetes mellitus.

CONCLUSIONS: The prevalence of coeliac disease is high in a rural Australian community. Most patients are undiagnosed, and asymptomatic.