

The increasing diagnosis of coeliac disease since the introduction of anti-TTG testing

K. Payne¹, H. R. Jenkins², I. H. Davies² and D. P. Tuthill²

Cardiff University¹ and Children's Hospital for Wales², Heath Park, Cardiff CF14 4XW, UK

Coeliac disease (CD) is a lifelong intolerance to gluten that affects approximately 1% of the UK population⁽¹⁾. It remains vastly underdiagnosed, with only approximately 10% of all cases being diagnosed. Research carried out at the University Hospital of Wales between 1983 and 1998 has shown an increase in the incidence of diagnosed childhood CD in South Glamorgan following the introduction of serological testing (antigliadin and anti-endomysial) in 1990⁽²⁾. The aim of the present study was to determine the incidence of diagnosed childhood CD within South Glamorgan between 1999 and 2007 and the effect of the introduction of anti-tissue transglutaminase (anti-tTG)⁽³⁾ testing in 2004.

CD incidence rates were calculated for cases diagnosed in the area of South Glamorgan between 1999 and 2007. Mean incidence rates were calculated for each 4-year interval. Population information was taken from the Registrar General's mid-year estimates of childhood population residing in South Glamorgan.

A total of fifty children aged <16 years were identified as residing in the area of Cardiff and the Vale of Glamorgan; thirty-six were diagnosed between 1999 and 2006. The total childhood population decreased slightly from 96 553 in 1999 to 89 630 in 2006.

Period	Incidence per 100 000 children per year
1983–6	1.38
1987–90	2.21
1991–4	1.66
1995–8	4.70
1999–2002	3.16
2003–6	6.88

The diagnosis of childhood CD in South Glamorgan generally rose throughout the current study period. A significant increase in incidence of the disease has been identified since the year 2004, which coincides with the introduction of anti-tTG testing. However, most cases of CD remain undiagnosed.

1. El-Hadi S, Tuthill D, Lewis E *et al.* (2004) *Arch Dis Child* **89**, 842.
2. Tuthill DP, Hawkes N, Fifield R *et al.* (1999) *Proceedings of the 8th International Symposium on Coeliac Disease Naples*, Abstract 062. Editors Aurricchio S, Greco L, Maiuri S and Troncone R. Università degli Studi di Napoli.
3. McPherson RA (2001) *J Clin Lab Anal* **15**, 105–107.