

## PLENARY

P01

**TRENDS IN PAEDIATRIC COELIAC DISEASE  
1990-2009: A UK REGIONAL RETROSPECTIVE  
AUDIT OF CASES**

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**Aim** To review all incident cases of paediatric coeliac disease (CD) in a UK region over the 20 year period from 1990-2009; to observe trends in incidence, symptom presentation, age at diagnosis and the impact of active screening of at-risk groups; and to audit laboratory results at diagnosis for 01/2005-12/2009.

**Methods** We performed a retrospective audit of case notes, pathology databases, endoscopy and electronic patient records for all children under 16 years diagnosed with CD on duodenal biopsy between 01/1990 and 12/2009 in a UK region of 1.25 million population, of whom 233,000 were aged <16 years of age.

**Results** 266 biopsy positive children were diagnosed during the 20 year study period with a mean increase in age-sex standardised incidence from 1.76 (95% CI 1.08-2.72) to 11.74 (95% CI 9.82-13.93) per 100,000 aged <16 years in the 1990-1994 and 2005-2009 epochs respectively ( $p=0.001$ ). The median (IQR) age at diagnosis also increased significantly from 29 (16-53.25) months to 90 (53.5-132.5) months in 1990-1994 and 2005-2009 epochs respectively ( $p<0.0001$ ). 21% of children presented non-classically in 2005-2009 compared to 5% in 1995-1999 ( $p=0.008$ ); this included children presenting monosymptomatically with one isolated gastrointestinal (GI) symptom and those with extra-intestinal symptoms. 7% of children were diagnosed through targeted screening in 1990-1994 compared to 23% in 2005-2009 ( $p=0.002$ ). Routine blood investigations demonstrated that over 25% were anaemic and over 50% were iron deficient at presentation in 2005-2009.

**Conclusions** The incidence of paediatric CD has increased seven-fold over the last 20 years in a UK region. Children are older at diagnosis, presenting with fewer GI symptoms, and with iron deficiency anaemia remaining the commonest laboratory abnormality. We suggest that this increase in incidence is largely due to both increased screening of at risk groups and a lower threshold for investigating for CD as a result of greater clinician awareness of the condition's heterogenic nature. A UK-wide study would be beneficial to identify national trends in incidence and symptomatology.



## Trends in paediatric coeliac disease 1990-2009: a UK regional retrospective audit of cases

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