A Demographic Profile Of Children Diagnosed With Coeliac Disease Presenting To The Paediatric Clinic At Queen’s Hospital Burton Upon Trent From 2005 To 2017

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Background and Aims

Coeliac disease is an immune-mediated systemic disorder elicited by gluten & related prolamins in genetically susceptible individuals. In the United Kingdom, 1 in 100 individuals are affected. It is estimated that only a quarter with this condition are currently clinically diagnosed. In children, delayed diagnosis can lead to growth failure, delayed puberty and dental problems.

We analysed demographic profile and clinical presentation of children with coeliac disease that presented to the paediatric clinic.

Methods

All children (<18 years) with confirmed coeliac disease diagnosed over a 13 year period (2005-2017) at the Queen’s Hospital, Burton were studied retrospectively. Information was retrieved from the electronic medical records and pathology results.

Results

In total, 70 (53% females) children had the confirmed diagnosis of coeliac disease (chart 1). Median age at diagnosis between 2005-2010 was 3 years and 3 months. This increased to 6 years and 9 months between 2011-2017 (Chart 2). Classical disease was present in 77%, (54 patients) whereas 23% (16 patients) had either non-classical presentations or belonged to high risk group such as those with Type-1 diabetes, positive family history or autoimmune disease (Chart 3). Abdominal pain was the most common presentation followed by iron deficiency anaemia and chronic diarrhoea.

Conclusions

The median age at diagnosis of coeliac disease more than doubled between the first and second part of the study period. Coeliac disease may present with non-gastrointestinal symptoms. Low threshold needs to be maintained for further diagnostic work up at all ages, even with atypical presentation and in high risk group in order to avoid long term complications associated with delayed diagnosis.

References

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Chart 1: Male to female ratio (N = 70)

Chart 2: Median age at diagnosis (in years)

Chart 3: Symptoms

Table 1: Presentation

	Number	%
Abdominal pain	32	46
Iron deficiency anaemia	20	29
Chronic diarrhoea	19	27
Positive family history	13	19
Short Stature	5	7
Faltering growth	4	6
Type 1 diabetes	4	6
Constipation	3	4
Miscellaneous	12	17