

B), two of them with +ve IgG AGA, the third one was seronegative for all the 3 serological markers but was at the same time deficient in the total IgA, one patient reacted positively to the IgG antigliadin only with normal histology and was dismissed as Giardiasis. The remaining 7 cases of giardiasis were seronegative to all tests

with normal s.IgA level. whether these results were due to Giardiasis or a concomitant celiac disease?, anyhow the 3 patients were put on gluten free diet (GFD) in addition to antiGiardia therapy, but unfortunately long-term follow up was not possible for these patients.

Table 4: Cases of Giardiasis

Marsh score		AGA		tTG	IgA
		IgG	IgA		
1	0	-ve	-ve	-ve	Normal
2	III B	-ve	-ve	-ve	Deficient
3	0	-ve	-ve	-ve	Normal
4	0	+ve	-ve	-ve	Normal
5	III A	+ve	-ve	-ve	Normal
6	III B	+ve	-ve	-ve	Normal
7	0	-ve	-ve	-ve	Normal
8	0	-ve	-ve	-ve	Normal
9	0	-ve	-ve	-ve	Normal
10	0	-ve	-ve	-ve	Normal
11	0	-ve	-ve	-ve	Normal

Discussion

People until recently thought that the geographical distribution of celiac disease was mostly restricted to Europe and other developed countries, nowadays in part due to the availability of the simple serological diagnostic tests, globalization of the problem of Celiac disease is ensured, following the recognition of increasing reports of the various forms of the disease from developing countries ^(8,9).

Celiac disease formed a significant part of our patients evaluated for malabsorption (about 62%). In an Indian study by Behera et al ⁽¹⁰⁾, CD formed 72% of causes of malabsorption in children and 52% of those in adults, pointing to the higher propensity of CD as a cause of malabsorption in developing countries.

About half of our CD patients were older than 10 years, with a similar age

incidence also documented by a previous Iraqi study. (Mohammed et al, 2001)⁽¹¹⁾, whether this was due to delayed diagnosis of the problem in our pediatric population, or probably mimicking the changing picture of CD reported by several researchers ^(12,13) in which the median age at presentation in children has shifted from early to late in the first decade of life. Still, most of our patients showed severe H.P changes (TVA), especially demonstrated in the older aged group, strengthening the probability of delayed diagnosis.

Serological markers showed variable sensitivity rates in our patients, in general ranging between 50% -77%, while tTG seemed to be specific enough to ensure the presence of celiac disease. The combined determination of AGA (IgG & IgA)