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Letter to the Editor

Bulb biopsy in adult celiac disease: pros outweigh the cons?

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Dear Editor,

We read the excellent study by the Taavela et al (1) suggesting caution when considering the diagnosis of pediatric celiac disease based on a duodenal bulb biopsy. We completely agree and share their concerns. However, we would like to pose a question: what are the 'big issues' in adult celiac disease? We would suggest that they are delays in diagnosis and under-diagnosis. Both US and UK studies have revealed that 5-13.6% of patients with newly diagnosed celiac disease have had a prior endoscopy where a chance to diagnose celiac disease was missed.(2, 3) By advocating a bulb biopsy the diagnostic rate is increased by approximately 10% (Table 1). Caution is required in the selection of patients who should have this performed - weight loss, anaemia, diarrhea, family history or positive serology, however for routine practice a duodenal bulb biopsy may not be necessary. The Finnish group has shown that all their cases of celiac disease had TG-2 IgA deposits within the bulb biopsy, which we believe further supports the merit of a bulb biopsy.(1) We have historically reported that 100% sensitivity for the detection of celiac disease can only be achieved in the presence of a bulb biopsy and more recently that even in ultra-short celiac disease (bulb only) there are systemic consequences.(4, 5) Surely the crucial next step is to enlist the help of our pathology colleagues by providing them with bulb biopsies in a separate pot to the second part of the duodenum samples? This may improve both interpretation and detection for a group of patients who have significant delays in their diagnosis.

Table 1: Studies evaluating the diagnostic yield of taking duodenal bulb biopsies

Year	Authors	Country	Adults / Pediatrics	Number of patients	Number of celiac disease (%)	Number of USCD (%)
2001	Vogelsang H et al	Austria	Adults	51	21 (41.2%)	2 (9.5%)
2004	Bonamico M et al	Italy	Pediatrics	95	95 (100%)	4 (4.2%)
2005	Brocchi E et al	Italy	Adults	1	1 (100%)	1 (100%)
2008	Hopper AD et al	UK	Adults	56	56 (100%)	1 (1.8%)
2008	Bonamico M et al	Italy	Pediatrics	1013	665(65.6%)	16 (2.4%)
2009	Rashid M et al	Canada	Pediatrics	35	29 (81.6%)	3 (11.4%)
2010	Weir DC et al	USA	Pediatrics	198	198 (100%)	10 (5.1%)
2010	Mangiavillano B et al	Italy	Pediatrics	47	42 (89.4%)	5 (11.9%)
2010	Gonzalez S et al	USA	Adults	80	40 (50%)	5 (12.5%)
2011	Levinson-Castiel R et al	Israel	Pediatrics	87	87 (100%)	6 (7.0%)
2011	Evans KE et al	UK	Adults	376	126 (33.5%)	11 (9.0%)
2012	Kurien M et al	UK	Adults	77	28 (36.4%)	5 (17.9%)
2013	Sharma A	Australia	Pediatrics	101	101 (100%)	8 (7.9%)
2014	Caruso R et al	Italy	Adults	42	25 (59.5%)	0 (0%)
2016	Stoven SA et al	USA	Adults	679	16 (2.4%)	1 (6.2%)

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