THE ROLE OF NEAR PATIENT COELIAC SEROLOGY TESTING IN THE FOLLOW-UP OF PATIENTS WITH COELIAC DISEASE

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Introduction The Biohit coeliac 'quick test' is a novel clinic based test, which uses a finger prick blood sample to rapidly determine tissue transglutaminase (tTG) IgA antibody levels. It has previously been shown to be useful in the diagnosis of new cases of coeliac disease. However, the role of this rapid near patient test has yet to be determined in the follow-up of patients with known coeliac disease, particularly in the assessment of dietary response. The aim of this study is to determine the accuracy of the quick test compared to established laboratory immunology (ELISA) analysis in the assessment of coeliac disease follow-up.

Methods The study was designed in two phases. The first retrospective phase compared the quick test to current laboratory immunology analysis on random stored serum samples from patients with known coeliac disease and those without. The second prospective phase involved the use of the quick test at the coeliac disease clinic in patients attending their annual follow-up including assessment of compliance by physician and dietician.

Results 70 serum samples were analysed in phase one; 29 samples used for the quick test were true positive compared to laboratory findings, and 37 true negative (sensitivity 93%; specificity 95%). Phase two involved 30 patients, in which 4 patients quick test were true positive, and 25 patients were true negative when compared to laboratory findings (sensitivity 80%; specificity 100%).

Conclusion The results from both phases illustrate good agreement between the coeliac quick test and established laboratory findings. Based on these preliminary results the coeliac quick test would seem to provide a rapid real time assessment for clinicians and dietitians within the clinic setting when assessing dietary compliance and response. Further studies are needed to determine if this near patient test will improve the cost effectiveness and efficiency of follow-up of coeliac disease patients. **Competing interests** None.

Keywords coeliac disease, dietetics, near patient test.