

the risk of celiac-related complications. All too often dietary indiscretions, inadvertent or otherwise, as determined by serological testing may not become evident until several weeks after the patient has left the clinic, necessitating recall of the patient for dietician review. Anti-deamidated gliadin peptides (anti-DGP) Rapid Test (Simtomax) is a validated point-of-care (POC) serology test for screening of celiac disease with high sensitivity and negative predictive value. It is a non-invasive test, providing immediate results, facilitating instant feedback and counselling regarding compliance to GFD.

**Aims/Background** To evaluate the reliability of Anti-DGP (Simtomax) in determining compliance to GFD when compared to that of serum IgA anti tTG and self reporting.

**Method** Patients with known CD were recruited from CD clinics at UCHG from November 2012 to January 2013. Patients' compliance to GFD was recorded by the attending doctors. Anti-DGP (Simtomax) tests and IgA anti-tTG were performed on the day of the clinic visit on all patients. Patients with IgA deficiency were excluded. The results of both serology tests and patient's compliance to GFD were examined.

**Results** Out of 55 patients recruited to date, 24 (43.6%) tested positive for anti-DGP and 31 (56.4%) were negative. 12 (50%) patients who tested positive for anti-DGP also had an elevated serum IgA anti-tTG. Of the remaining 12 (50%) who tested positive, 3 (12.5%) had serum IgA anti tTG <1 U/ml and 9 (37.5%) had IgA anti tTG level ranging from 3 to 9 U/ml. Normal reference range for IgA anti tTG (0-10 U/ml). All patients who tested negative for anti-DGP had normal IgA anti tTG level (IgA anti tTG <10 U/ml).

If serum IgA anti tTG is used as a measure of compliance to GFD, then the sensitivity of anti-DGP in predicting dietary compliance was 100%, with a specificity of 72% and a negative predictive value of 100%. When compliance was determined based on patients' self-reporting during the consultation, 11 (20%) patients were documented as not fully compliant to GFD. 8 (72.7%) of these were anti-DGP positive and had elevated serum IgA anti tTG, and 3 were anti-DGP positive with IgA anti- tTG level in the normal range (with their IgA anti tTG level ranged between 3 to 9 U/ml). Four (7.3%) patients reported compliance to GFD but had positive anti-DGP tests and elevated IgA anti tTG levels.

**Conclusion** The high sensitivity and negative predictive value of Anti- DGP point-of-care test is in concordance with previous studies. In routine annual CD clinic setting, anti-DGP performed marginally better than IgA anti-tTg in determining gluten ingestion with the added benefit of an instantaneous result, thereby facilitating immediate feedback and education regarding dietary compliance.

74

#### ANTI-DEAMIDATED GLIADIN PEPTIDES RAPID TEST (SIMTOMAX) AS A SIMPLE AND QUICK MEASURE OF COMPLIANCE TO GLUTEN FREE DIET IN PATIENTS WITH CELIAC DISEASE

Y Y Hong, C Kiat, V Byrnes *Department of Gastroenterology, University Hospital Galway, Galway, Ireland*

10.1136/gutjnl-2013-305143.74

**Introduction** Celiac disease (CD) is an immune-mediated enteropathy, characterised by intolerance to dietary gluten. Compliance to gluten free diet (GFD) is essential to minimise



# ANTI-DEAMIDATED GLIADIN PEPTIDES RAPID TEST (SIMTOMAX) AS A SIMPLE AND QUICK MEASURE OF COMPLIANCE TO GLUTEN FREE DIET IN PATIENTS WITH CELIAC DISEASE

Y Y Hong, C Kiat and V Byrnes

*Gut* 2013 62: A31

doi: 10.1136/gutjnl-2013-305143.74

---

Updated information and services can be found at:

[http://gut.bmj.com/content/62/Suppl\\_2/A31.2](http://gut.bmj.com/content/62/Suppl_2/A31.2)

---

*These include:*

## **Email alerting service**

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

---

## **Notes**

---

To request permissions go to:

<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:

<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:

<http://group.bmj.com/subscribe/>