

- Ongoing IDA/GI bleeding show an increased yield with 8/17 (47%) having a positive 1st study and 10/17 (59%) a positive 2nd study.

21 had a repeat despite a positive 1st study (excluding surveillance), 71% had positive repeat with resulting change in management in 73%. 9/15 done for ongoing symptoms, 6/15 for incomplete/poor views.

Conclusion Limited data exist regarding the yield of repeat CE, it is suggested by the literature that yield of a repeat study is better in those with GI bleeding/anaemia. Our results suggest that the group with the highest yield (3 fold increase) on repeat are those with poor views or an incomplete initial study. There is an improvement in yield with 2nd study for those with ongoing symptoms of IDA or GI bleeding in keeping with previous literature.

Disclosure of Interest C. Parker Grant/Research Support from: Imotech Medical, P. Rajasekhar: None Declared, R. Bevan: None Declared, C. Davison: None Declared, S. Panter: None Declared

REFERENCES

1. Yield of repeat VCE in obscure GI bleeding. Jones *et al.* Am J Gastro 2005;100(5): 1058–64
2. Diagnostic yield of repeat capsule endoscopy. Svarta *et al.* Can J Gastro 2010;24(7): 441–22

PTU-189 ACCURACY OF SIMTOMAX RAPID COELIAC SCREENING TEST COMPARED WITH ELISA TTG ASSAY AND DUODENAL BIOPSY

doi:10.1136/gutjnl-2013-304907.279

¹D McClements, ¹R Rivera-Forrester, ¹F Horsted, ²C Murphy, ¹C Probert, ¹S Subramanian. ¹Gastroenterology; ²Immunology, Royal Liverpool University Hospital, Liverpool, UK

Introduction Point-of-care testing kits are now available for coeliac disease (CD). Simtomax® is a rapid screening test which detects IgA deficiency as well as IgA and IgG antibodies to deamidated gliadin peptide (DGP). We evaluated the performance of the Simtomax® rapid screening test for CD against routine lab ELISA tTG testing and histologically confirmed CD.

Methods A retrospective study of 191 patients who underwent CD serological testing at the Royal Liverpool University Hospital was carried out. Electronic casenotes were interrogated to identify serology, endoscopy and histology results. The saved serum was tested using the Simtomax® test kit as per the manufacturer's instructions. Any Simtomax® test that was incongruous with ELISA or biopsy results was re-tested. Sensitivity, specificity, positive predictive values (PPV) and negative predictive values (NPV) were calculated for Simtomax® and compared to histology and tTG ELISA.

Results All 191 patients underwent ELISA testing. Twenty six (13.6%) patients had positive ELISA testing; of these the Simtomax® test was positive in 20 patients and negative in 6. One hundred and sixty five (86.4%) patients had negative ELISA testing; of these Simtomax® was negative in 164 patients and positive in 1. Using ELISA as the gold standard the sensitivity of the Simtomax test was 77% (95% CI 56–90%), specificity 99% (96–99%), PPV 95% (76–99%) and NPV 96% (92–99%). Forty four patients underwent gastroscopy and duodenal biopsy. 15 patients had histological evidence of CD, of these Simtomax® test was positive in 11 patients and negative in 4; tTG ELISA was positive in all (median titre 58, range 7.8 to 80). Twenty nine patients had negative histology; of these all 29 Simtomax® tests were negative; tTG was negative in all except one patient. Using duodenal biopsy as the gold standard the sensitivity of Simtomax® was 73% (95% CI 45% > 91%), specificity 100% (85% > 100%), PPV 100% (68% > 100%) and NPV 88% (71% > 69%). No patients in the group were identified as having IgA deficiency by standard assay or Simtomax® testing. No false negative or false positive result was altered by re-testing.

Abstract PTU-189 Table 1 Simtomax® vs ELISA tTG and Duodenal Biopsy

	ELISA tTG Positive	ELISA tTG Negative	Duodenal Biopsy Positive	Duodenal Biopsy Negative
Simtomax® Positive	20	1 [†]	11	0
Simtomax® Negative	6 [*]	164	4	29

*Positive histology 4, negative histology 1, duodenal biopsy not performed 1.
†Duodenal biopsy not performed

Conclusion The Simtomax® testing kit has good specificity but is limited by its low sensitivity. The findings of our pilot study argue against using Simtomax® testing to screen for CD. Further large scale studies correlating tTG and Simtomax® to histology are indicated.

Disclosure of Interest None Declared.

PTU-190 SMALL BOWEL CAPSULE ENDOSCOPY IN PATIENTS WITH UNEXPLAINED ANAEMIA/GASTROINTESTINAL BLEEDING AND CHRONIC KIDNEY DISEASE

doi:10.1136/gutjnl-2013-304907.280

¹E Docherty, ²A Koulaouzidis, ²S Douglas, ^{1,2}J N Plevis. ¹Medical School, The University of Edinburgh; ²Centre for Liver & Digestive Disorders, The Royal Infirmary of Edinburgh, Edinburgh, UK

Introduction The use of small-bowel capsule endoscopy (SBCE) has revolutionised investigating the small-bowel. However, there are only few reports ^{1,2} on the Diagnostic Yield (DY) of SBCE in patients (pts) with chronic kidney disease (CKD) and unexplained anaemia and/or obscure gastrointestinal bleeding (OGIB).

Methods Retrospective study; our SBCE database was searched (March 2005 to August 2012) for pts with estimated glomerular filtration rate (eGFR) < 60 ml/min/1.73 m². Subsequently, electronic case notes of pts with low eGFR who underwent SBCE for anaemia and/or OGIB were retrieved and abstracted. A mean eGFR value -for up to 5 years prior to SBCE- was calculated for each case. Severity of CKD was defined according to Renal Association recommendations as: stage 3 (eGFR: 30–59); stage 4 (eGFR: 15–29); and stage 5 (eGFR < 15 or on dialysis). Numerical values were expressed as mean ± SD or median (range).

Results In the aforementioned period, 69 pts with eGFR < 60 were referred for SBCE. 65/69 (92.8%) had CKD stage 3 (eGFR 49 ± 7.9) and 4/69 (7.2%) stage 4 (n = 3) or 5 (n = 1). 51/65 (78.5%) of stage 3 CKD pts were referred for SBCE due to unexplained iron deficiency anaemia and/or OGIB [43 (66.1%) & 8 (12.3%), respectively]. 25/51 (49%) had normal SBCE, while 17/51 (33.3%) had angioectasias; other findings were active bleeding (n = 2), non-specific fold oedema (n = 2), ileal erosions (n = 1), adenocarcinoma (n = 1) and inconclusive/videos not available (n = 3). All pts (n = 4) with CKD 4 or 5 were referred due to unexplained anaemia. 3/4 (75%) had angioectasias and 1 normal SBCE. Faecal calprotectin (FC) was measured in 12 pts with CKD stage 3 and unexplained anaemia prior to SBCE; No sinister pathology or significant small-bowel inflammation was found in this subgroup.

Conclusion SBCE has limited DY in CKD pts referred for investigation of unexplained anaemia. The most common finding is angioectasias, while sinister small-bowel pathology is rare. Furthermore, FC measurement prior to SBCE -in this cohort of pts- is not associated with increased of DY.

Disclosure of Interest None Declared.

REFERENCES

1. Karagiannis S *et al.* Wireless capsule endoscopy in the investigation of patients with chronic renal failure and obscure gastrointestinal bleeding (preliminary data). World J Gastroenterol 2006; 12:5182–5.
2. Ohmori T *et al.* Abnormalities of the small intestine detected by capsule endoscopy in hemodialysis patients. Intern Med 2012; 51:1455–60.