Results
ELISA.
were calculated for Simtomax® and compared to histology and tTG
tive predictive values (PPV) and negative predictive values (NPV)
instructions. Any Simtomax® test that was incongruous with
serology, endoscopy and histology results. The saved serum was
carried out. Electronic casenotes were interrogated to identify
gliadin peptide (DGP). W
liac disease (CD). Simtomax® is a rapid screening test which detects
1Gastroenterology; 2Immunology, Royal Liverpool University Hospital, Liverpool, UK
or false positive result was altered by re-testing.

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

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PTU-189
ACURACY OF SIMTOMAX RAPID COELIAC SCREENING TEST COMPARED WITH ELISA tTG ASSAY AND DUODENAL BIOPSY
doi:10.1136/gutjnl-2013-304907.279
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Introduction
Point-of-care testing kits are now available for coe-
liac disease (CD). Simtomax® is a rapid screening test which detects
IgA deficiency as well as IgA and IgG antibodies to deamidated
gladin 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, posi-
tive 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 Simto-
max® 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 evi-
dence 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% (25% > 100%), PPV 100% (68% > 100%) and NPV 88% (71% >
69%). No patients in the group were identified as having IgA defi-
ciency by standard assay or Simtomax® testing. No false negative
or false positive result was altered by re-testing.

Abstract PTU-189 Table 1

<table>
<thead>
<tr>
<th></th>
<th>ELISA tTG Positive</th>
<th>ELISA tTG Negative</th>
<th>Duodenal Biopsy Positive</th>
<th>Duodenal Biopsy Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simtomax® Positive</td>
<td>20</td>
<td>1</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Simtomax® Negative</td>
<td>1</td>
<td>164</td>
<td>4</td>
<td>29</td>
</tr>
</tbody>
</table>

*Positive history 4, negative history 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
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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 (OGBB).

Methods
Retrospective study; our SBCE database was searched
(March 2005 to August 2012) for pts with estimated glomerular filtr-
ation rate (eGFR) < 60 ml/min/1.73 m². Subsequently, electronic
case notes of pts with low eGFR who underwent SBCE for anaemia
and/or OGBB 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 OGBB [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 inconclu-
sive/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 sin-
ister pathology or significant small-bowel inflammation was found
in this subgroup.

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

Disclosure of Interest
None Declared.

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