be particularly useful to control oozing. Larger prospective controlled studies are required to further determine its exact role in upper and lower GI bleeding.

REFERENCE


Disclosure of Interest None Declared.

**PTU-030** 10 YEAR RETROSPECTIVE REVIEW OF ABDOMINAL TUBERCULOSIS FROM A LONDON TEACHING HOSPITAL: DIAGNOSTIC METHODS

1JS Nayagam*, 2C Mullender, 1A Poullis, 2CC Osogrove. 1Gastroenterology and Hepatology, St George’s Hospital, London, UK; 2Clinical Infection Unit, St George’s Hospital, London, UK

10.1136/gutjnl-2014-307263.104

Introduction Abdominal tuberculosis (TB) is difficult to diagnose, due to non-specific symptoms and radiological, histological and endoscopic similarity to other conditions. It can mimic Crohn’s disease and should always be considered as a differential diagnosis. There are significant risk of incorrectly diagnosing TB and committing patients to a prolonged course of toxic chemotherapy; or missing TB with public health implications and causing life-threatening disseminated TB when immunosuppressing patients. We sought to review the route to diagnosis of patients treated for abdominal TB, their sites of disease and the yield of various diagnostic modalities.

Methods A retrospective review of patients treated at St George’s Hospital, London, for abdominal TB from June 2003 to August 2013 was conducted. Information was gained from electronic patient records and the hospital’s tuberculosis database.

Results 65 cases of abdominal TB were identified. Average age was 42 years (range 18–97), with 49.2% females.

Pre-diagnosis: 49.2% underwent endoscopy, 64.6% ultrasound, 70.8% CT, 3.1% MRI and 10.8% small bowel series.

TB was cultured in 47.7% of patients, in the remaining 52.3% the diagnosis of abdominal TB was based on radiology, symptoms, suggestive histopathology, exclusion of other conditions or TB at another site.

The site was: peritonitis in 35.4%, enteritis in 27.7%, solid organ TB in 3.1%, combination of sites in 33.8%, 24.6% had co-existent pulmonary TB isolated on sputum culture.

The rate of culture positivity varied from modality of specimen acquisition as outlined in the table. 1 case was resistant to isoniazid and streptomycin.

Conclusion Confirming a diagnosis of abdominal TB is notoriously difficult, with the rate of positive culture below 50% in our series. Non-invasive imaging is commonly used and is useful to characterise the phenotype of abdominal TB and suggest sites for sampling, however it does not assist in obtaining a definitive diagnosis. Invasive testing is a cornerstone of diagnosis. Ascitic fluid and surgically acquired biopsies had a higher diagnostic rate than endoscopy. There was a low rate of endoscopic biopsies being sent for Microbiology. If TB is part of the differential diagnosis endoscopists must ensure microbiological samples are taken into normal saline solution and sent for mycobacterial culture.

Disclosure of Interest None Declared.

**Abstract PTU-030 Table 1**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Number</th>
<th>Histology sent (%)</th>
<th>Histology suggestive of TB (%)</th>
<th>Microbiology sent (%)</th>
<th>Culture +ve (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paracentesis</td>
<td>20</td>
<td>20 (100%)</td>
<td>7 of 9 (77.8%) without TB had lymphocytic effusion</td>
<td>19 (95%)</td>
<td>11 (57.9%)</td>
</tr>
<tr>
<td>Endoscopy</td>
<td>32</td>
<td>28 (87.5%)</td>
<td>14 (50%)</td>
<td>10 (31.3%)</td>
<td>3 (30%)</td>
</tr>
<tr>
<td>Surgery</td>
<td>16</td>
<td>15 (93.8%)</td>
<td>14 (93.3%)</td>
<td>13 (81.3%)</td>
<td>9 (69.2%)</td>
</tr>
</tbody>
</table>

**Disclosure of Interest** None Declared.
TWO WEEK RULE REFERRALS FOR UPPER GI CANCER: A52
et al and sensitivity for upper GI cancer. 2 This study aimed to an-
around 4%. 1 Alarm symptoms have very variable specificity
of gastric cancer in patients undergoing TWR endoscopy is
vetted by two consultants, and in the majority of cases patients
under the two week rule (TWR) referral pathway. Referrals are
Patienta with alarm symptoms for upper gastroin-
1 Richey R, et al [Gastroenterology, St George’s Healthcare NHS Trust, London, UK]
10.1136/gutjnl-2014-307263.106
Introduction Patients with alarm symptoms for upper gastroin-testinal (GI) cancer or those over 55 years with persistent,
Methods A prospective analysis of patients referred to a single
centre in South London (St George’s Hospital) under the TWR
pathway for upper gastrointestinal cancer was performed.
Patients referred during two random four week periods in 2012
were identified. The referral form, endoscopy records, clinic let-
ters, radiology reports and histology results were reviewed.
Results Data were analysed for 114 patients. Mean age was 63
years, with 23% of referrals aged under 55 years.
96 (84%) patients went direct to OGD, of which 3 (3%) had
upper GI cancer and 4 (4%) had significant non-malignant path-
ology. In the 27 (28%) patients under 55, no significant path-
ology was identified at OGD. Dyspepsia, dysphagia and weight
loss were the commonest indications for the referrals.
47 (49%) patients had further imaging after endoscopy of
which 18 (38%) had significant pathology leading to a change
in management.
18 (16%) were seen directly in clinic following referral of
which 11 (61%) went on to have further imaging. Of these
patients, 45% had malignancy and 35% had significant abnor-
malities leading to a change in management.
Conclusion The yield of pathology at OGD undertaken as a first
line investigation in patients referred via the TWR pathway is
low, regardless of the referral criteria. However, imaging modal-
ities appear to have a reasonably high yield of pathology in this
group of patients. This suggests that General Practitioners are
identifying the correct group of patients for referral, but that per-
haps OGD is not the most appropriate first line test. Clinical
review, as a first point of contact of patients referred via the
TWR pathway, is likely to facilitate a more guided investigation
process, while reducing the number of endoscopies being under-
taken, and has potential cost-saving implications.
REFERENCES
1 Gut 2005;54(1):40–5
2 Gastroenterology 2006;131(2):390–401
Disclosure of Interest None Declared.
PTU-033 THE UTILITY OF NARROW BAND IMAGING ENDOSCOPY
IN IDENTIFYING POTENTIAL CAUSES OF IRON
DEFICIENCY ANAEMIA IN THE ABSENCE OF ANY OVERT
GI CAUSE
1 JR White*, S Sami, J Ortí Fernández-Sando, K Mannoth, K Ragunath. 2 NIHR BRU in
Gastrointestinal and Liver Diseases at Nottingham University Hospitals NHS Trust and the
University of Nottingham, Nottingham, UK; 2Gastroenteroology, University Hospitals
Coventry and Warwickshire NHS Trust, Coventry, UK
10.1136/gutjnl-2014-307263.107
Introduction IDA is prevalent in up to 5% of the developed
world and endoscopy remains the most utilised investigation.
Magnified white light endoscopy has been shown to accurately
identify gastric atrophy, H. pylori gastritis and coeliac disease but
the role of magnified NBI endoscopy (NBI-Z) in this context has
not been evaluated. The study aim was to assess the ability of
NBI-Z to make a real time diagnosis of these conditions com-
pared to histology as the gold standard.
Methods This prospective cohort study recruited patients
undergoing endoscopic evaluation for IDA. All procedures were
performed with an Olympus video endoscopy system by clini-
cians with advanced imaging experience. Systematic NBI-Z
imaging in parts of the duodenum and gastric mucosa were
taken with corresponding biopsies. A previously validated Not-
ttingham Type 1–4 classification system was used to classify
the characteristic gastric mucosal pit pattern, and magnified mor-
phological features were used to describe intestinal metaplasia
and villous atrophy. This allowed for a real time diagnosis to
be made for villous atrophy, gastric atrophy and H. pylori gas-
tritis. The specimens were examined by a single blinded GI
pathologist.
Results 105 patients were recruited over 3 years. Excluding
those with an obvious cause (n = 11), a total of 94 patients
were included in the final analysis. Female: male ratio was 1:
0.7, median age 66 years (range 21–85). 38% had significant co-
morbidities. At time of endoscopy 52% were taking iron therapy,
19% aspirin, 30% PPI and 4% NSAIDs. The median (range)
anemia parameters were: Hb 10.8 g/dL (7.7–12.6), MCV 82 fl
(60–97), Ferritin 10 g/L (1–379) and iron 7.5 μmol/L (1–22).
73% had the procedure under sedation with median doses of
2.5 mg midazolam and 25 mg pethidine.
Conclusion In patients with IDA, NBI-Z is highly specific in pro-
viding a real time diagnosis of gastric atrophy and coeliac disease.

Abstract PTU-033 Table 1 NBI performance (%) compared to histology with 95% confidence intervals

<table>
<thead>
<tr>
<th>NBI performance (%)</th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>Positive predictive value</th>
<th>Negative predictive value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1 predicting normal</td>
<td>100 (81.4–100)</td>
<td>24.2 (18.8–24.2)</td>
<td>27.7 (22.5–27.7)</td>
<td>100 (77.7–100)</td>
</tr>
<tr>
<td>Type 2/3 predicting H. pylori gastritis</td>
<td>100 (76.9–100)</td>
<td>28.8 (22.6–28.8)</td>
<td>27.5 (21.1–27.5)</td>
<td>100 (78.4–100)</td>
</tr>
<tr>
<td>Type 4 predicting atrophy</td>
<td>92.9 (72.7–99.9)</td>
<td>93.7 (72.7–99.9)</td>
<td>92.9 (72.7–99.9)</td>
<td>93.3 (74.5–94.4)</td>
</tr>
<tr>
<td>Predicting Intestinal Metaplasia</td>
<td>50 (15.8–65.8)</td>
<td>98.1 (94.9–99.9)</td>
<td>75 (23.1–98.7)</td>
<td>94.6 (91–96.3)</td>
</tr>
<tr>
<td>Predicting Villous Atrophy</td>
<td>66.7 (13.6–97)</td>
<td>98.7 (96.6–97)</td>
<td>66.7 (13.6–97)</td>
<td>98.7 (96.6–99.9)</td>
</tr>
</tbody>
</table>