Persistence of Symptoms After Successful Eradication of Helicobacter Pylori in the Duodenal Ulcer Disease

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An Initial ulcer healing has never been a problem rather it is the relapse of the ulcer which is a clinical challenge, and if (Helicobacter Pylori) Hp eradication can be achieved, ulcer relapse is not expected. However it has been a common clinical experience that despite successful therapy these patients continue to suffer from upper GI symptoms. An audit was made to scrutinize the symptoms up to six months after the helicobacter pylori was successfully eradicated. 100 symptomatic endoscopically proven duodenal ulcer patients were included in the study and were given Lanzoprazole 30 mg bid, Amoxycillin 1gm bid, Clarithromycin 250mg bid with and without Tinidazole 500 mg bid for seven days. Ulcer healing and H pylori eradication was confirmed after three months by endoscopic assessment, mucosal rapid urease test and gastric antrum mucosal biopsy. 86 patients completed the seven day treatment and at the end of three months 72 patients were confirmed to be ulcer free and H. pylori negative. Only 51 patients could be followed upto six months after the eradication treatment and 20 patients were found to have upper GI type symptoms. The complaints were as follows: continuing abdominal pain (10 patients), water brash (9 patients), heart burn (5 patients), gas and flatulence (15 patients), and incomplete evacuation of bowels (4 patients). Majority of the patients had more than one symptom (16 patients) and most common combination was of flatulence, gas, abdominal pain and water brash (8 patients).It appears that Hp eradication helps us in avoiding ulcer and its complications but a good percentage of people continue to complain of upper GI type symptoms afterwards as well.

Key words: Duodenal ulcer, helicobacter Pylori eradication, recurrence.

Peptic ulcer disease is known for its relapsing and remitting character and that is why the dictum ' once an ulcer always an ulcer' has been so popular over the years[1] but with the discovery of helicobacter pylori and identification of its role in the pathogenesis of type B gastritis, Gastric ulcer, Duodenal ulcer, Gastric carcinoma and MALT lymphoma, an eradication of this organism from the gastric epithelium of the patients[2,3] suffering from duodenal disease raises the hope of making our patients trouble free. Patients suffering from duodenal ulcer disease present with wide variety of symptoms and a positive diagnosis is made after the endoscopic and /or radiological confirmation of ulcer crater. In the back ground of heterogeneous symptoms, the Hp eradication treatment though cures the ulcer but few patients continue to complain of upper GI type symptoms needing a continuing care[1,4]. Objective of this study is to evaluate the patients suffering from duodenal ulcer disease, where successful eradication has been achieved and find out the symptom profile.

Material and Methods

Out of the routine endoscopy list for all indications and reasons, 100 patients suffering from uncomplicated duodenal ulcer having a positive rapid urease test (modified rapid urease test) were selected out. They were recruited into the trial with an intention to treat and an informed consent was obtained. Patients having past history of intolerance to penicillin, macrolides and nitroimidazoles were excluded from the trial. A coexisting liver disease, significant cardiopulmonary illness, use of NSAID's for any reason, rheumatological disorders or a metabolic disorder were exclusion points. The patients coming from far off areas or having a problem in coming back to us later on were also excluded from the trial.

These 100 patients were given an effective triple anti helicobacter pylori regimen (Lanzoprazole 30mg bid along with amoxycillin 1gm bid and clarithromycin 250mg bid for seven days), or an effective quadruple antihelicobacter pylori regimen (all the above medicines plus Tinidazole 500mg bid for seven days). Patients were not blinded with the treatment regimen used and neither they were told that the results are going to be compared against some other group. An easy access on telephone or in person was assured and ensured in every case and patients were advised to contact us in case of problem rather than changing medicine at their own. Patients were reevaluated clinically after seven days and endoscopically as well clinically after three months and six months. In between a regular fortnightly telephonic or a formal clinic contact was maintained to keep them under observation. Rapid urease enzyme test and histopathology of gastric antrum mucosal biopsies carried out at three months of completion of medicines. Results were interpreted as Hp infection present or absent at three months. The patients symptomatology profile followed for six months and an

analysis was made.

Results

100 patients entering into the trial had a mean age of 43.5 yr. (range 21 - 72yrs). There were 52 male patients entering into trial as compared to 48 female patients (ratio 1.08:1). Out of the 100 patients entering into the trial 86 patients completed the seven days anti helicobacter treatment and at the end of three months, when the first detailed re evaluation was made, 72 patients (83.72%) were confirmed to be ulcer free and helicobacter pylori negative on the basis of an upper GI endoscopy, antral mucosal urease test and antral mucosal histopathology. Only 51 out of these Hp eradicated patients (70.83%) could be followed upto six months when a detailed clinical evaluation was made for the final time. 20 patients (39.21%) were found to have continuing upper GI symptoms at the end of six months. continuing abdominal pain (10 patients), water brash (9 patients), heart burn (5 patients), gas and flatulence (15 patients), and incomplete evacuation of bowels (4 patients). Majority of the patients had more than one symptom (16 patients) and most common combination was of flatulence, gas, abdominal pain and water brash (8 patients).

Table I

Mean age in yr.	43.5 yr.
Sex ratio M : F	52: 48
Absconder at 7 days	4
Absconder at 90 days	4
Absconder at 6 mnths	49
no of pt. Completing trial at three months	86
Hp +ive at three mo.	14
H/P +ive at three mo.	12
Hp eradication successful	72/86
No. of Pt completing trial at 6 months	51
No. of pt having symptoms at 6 mo.	20

Table 2: Persistant Symptoms

Continuing abdominal pain	10 patient
water brash	9 patients
heart burn	5 patients
gas and flatulence	15 patients
incomplete evacuation of bowels	4 patients

Discussion

Duodenal ulcer disease has been till recent past considered as a chronic disease marked by remissions and relapses[4,5,6]. It is only after the discovery of the Helicobacter Pylori a spiral shaped bacteria that a better understanding has emerged and we have come to know that by eradicating this organism the Duodenal Ulcer disease can be cured[1,2,3],. Patients suffering from duodenal ulcer disease present with wide array of symptoms and generally it is difficult to make a confident diagnosis on clinical grounds alone and the clinical impressions should always be supplemented by an endoscopic view of the upper GI tract or radiological contrast imaging of the region. There is a big overlap of the symptoms of Gastroesophageal reflux disease (GERD), hepatobiliary insufficiency, and functional bowel disorders and a given patient may be suffering from more than one of the above mentioned conditions[4,5,7]. Similarly a gastric dysmotility and gastroesophageal sphincter incoordination may develop in long standing cases of type B gastritis and duodenal ulcer disease and in an otherwise proven case of duodenal ulcer, few of the symptoms may persist even after the eradication of Helicobacter Pylori indicating a persistent dysmotility of upper GI tract secondary to the infection or otherwise an independent disease amongst the categories mentioned above[4,5,8,9]. From the clinical and prognostic point of view it is important to eradicate the H. Pylori in a duodenal ulcer patient, as it reduces the chances of development of complications of duodenal ulcer disease, gastric adenocarcinoma, and MALT lymphoma, while at the same time reducing the overall cost of treatment for the chronic management of duodenal ulcer disease though not reducing the prevalence of non ulcer dyspepsia[8,9,10,11,12,13]. The persistence of the symptoms in the patients included in this trial may be an unmasking of the co existant non ulcer dyspepsia or alternatively as the evidence is emerging that helicobacter pylori eradication aggravates the reflux problem and a sub clinical reflux could have turned into a clinical reflux problem, therefore a continuing medical care may be required in these patients.

Conclusions

The results of this study show that with an effective helicobacter pylori eradication treatment, though we are able to reduce the chances of morbidity and the cost of continuing care associated with a chronic duodenal disease but otherwise a good percentage continue to complain of dyspeptic symptoms which may be indicative of an underlying coexistent non ulcer dyspepsia, hepatobiliary pathology or irritable bowel syndrome.

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