Introduction
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The presence of spiral organisms in the stomach of man and animals has been known since the last century. Bizzozero saw spiral organisms in the stomach of various animals which were later on reported in humans by Kirenitz in 1906 [1,2]. However, as these 'spirochaete like' structures were not uniformly demonstrable their importance was forgotten. It was only in the early nineteen eighties that Warren and Marshall could culture and document the presence of these S-shaped bacilli in the antral mucosal biopsy specimens of the stomach (3). These campylobacter like organisms were subsequently termed as *Helicobacter pylori*.

*Helicobacter pylori* is probably the most common infection in the world. The problem, however, is not its frequency of occurrence but the propensity of this bacterium for causing gastrointestinal disease that determines its public health significance. This spiral microaerophilic bacterium has been identified as the cause of chronic gastritis, peptic ulcer disease, gastric cancer and mucosa associated lymphoid tissue (MALT) lymphoma. Less well accepted are its role in non-ulcer dyspepsia and its more indirect influence on coronary artery disease, rosacea, diarrhoeal diseases in children in developing countries and hepatic encephalopathy [4-6].

Higher *H pylori* infection rates have been reported with increasing age from all over the world. It is seen to be more prevalent in certain ethnic groups [7-9]. However, regardless of the ethnic background, people in developing countries
acquire infections earlier than those in developed countries. The epidemiology of *H pylori* in India differs from that observed in developed countries (10). Even though the medical, economic and social significance of *H pylori* has been recognised in the West, the situation in India is not fully clear. Data concerning the prevalence of *H pylori* in the normal population or in patients with upper alimentary tract disorders is scanty especially from South India [11].

*Helicobacter pylori* infection can be considered as an infection acquired in childhood that will last most, if not all, of the individual’s life [12]. In developed countries, children of families at the lowest socio-economic strata are infected [12,13]. Exposure to *H pylori* occurs early in India and is widespread even in the normal population [10,14]. A position paper based on several studies from India has shown that more than half the general population is infected with this organism [10,11]. This paper included only two series from South India. Data on infection rate in children in the southern part of India is scanty [15]. Establishment of prevalence rates of *H pylori* in “normals” and “abnormals” will help in understanding the relationship between *H pylori* infection in patients and different upper gastrointestinal disorders in this region.

The major complications of duodenal ulcer disease are bleeding, perforation and gastric outlet obstruction. Among patients who present with bleeding ulcers, approximately one-third will develop recurrent bleeding in the following 1-2 years if left untreated after initial ulcer healing [16]. In recent years accumulated data
suggests that *H pylori* eradication may reduce the recurrence of peptic ulcer and rebleeding [17]. The prevalence of *H pylori* and its association with bleeding duodenal ulcer has not been adequately studied in India. It has to be seen whether the prevalence of *H pylori* is as high as that seen in uncomplicated duodenal ulcer. Reports on *H pylori* and gastric outlet obstruction are scanty worldwide. Eradication of this organism and consequent beneficial effects in patients with gastric outlet obstruction have been reported but are anecdotal [18]. The relationship of *H pylori* to healed duodenal ulcers giving rise to gastric outlet obstruction has not been clearly established.

Surgical treatment of perforated duodenal ulcer involves immediate surgery and either an omental patch repair or definitive surgery for the ulcer performed at the time of perforation closure itself. However, an unacceptably high recurrence rate of duodenal ulcer relapse ranging from 42% to more than 50% makes it imperative to consider some form of therapy to reduce the morbidity in the form of reperforation, hemorrhage, obstruction or intractibility [19]. Definitive surgery as an alternative treatment has a disadvantage that in the long term it might cause side effects which are troublesome especially in those patients who might otherwise have been cured by simple closure alone [20].

The poor results of a simple closure of perforated duodenal ulcer and the problems associated with definitive surgery have led to the use of H₂ blockers and proton pump inhibitors in this condition. However, the results of these studies are
Attention has recently been focused on evaluating the role of \textit{H pylori} in perforated duodenal ulcer. Presently only limited reports are available indicating the significance of \textit{H pylori} infection in perforated duodenal ulcer [23-25]. None of the studies address the role of eradication of \textit{H pylori} on the natural history of perforated duodenal ulcer. Eradication therapy was recommended by Sebastian et al, in all patients with perforated peptic ulcer associated with \textit{H pylori} based on the association of \textit{H pylori} with recurrent ulcer on short term follow up [24]. However, their study involved only 29 patients and follow up was limited to 6 weeks.

Establishment of a positive correlation of \textit{H pylori} prevalence with medium and long term recurrence following simple closure of perforated duodenal ulcer would explain the cause of the high recurrence rate of duodenal ulcer following simple closure. This would enable a proper therapeutic strategy to be formulated for patients presenting with perforated duodenal ulcer. The problems in selecting patients for definitive surgery and the complications associated with it makes it imperative to find an alternative line of management which can reduce the recurrence rate following simple closure. If \textit{H pylori} infection is proved to be associated positively with ulcer recurrence, measures aimed at targeting this organism would become imperative after simple closure of a perforated duodenal ulcer.

The current study was planned to document the prevalence rate of \textit{H pylori} in patients without any gastrointestinal disorders (adult and children), in various upper alimentary tract disorders including complications of duodenal ulcer such as
bleeding and gastric outlet obstruction. Yet another purpose of the study was to determine the prevalence of *H pylori* in perforated duodenal ulcer and to correlate the *H pylori* status with the medium and long term ulcer recurrence following simple closure of perforated duodenal ulcer.