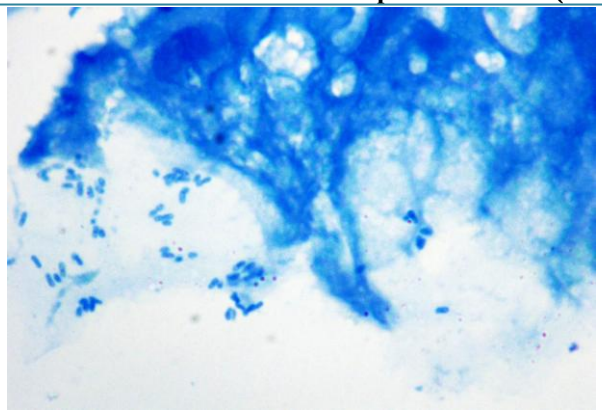

Figure 1: GIMESA X 1000 spiral H.pylori are seen

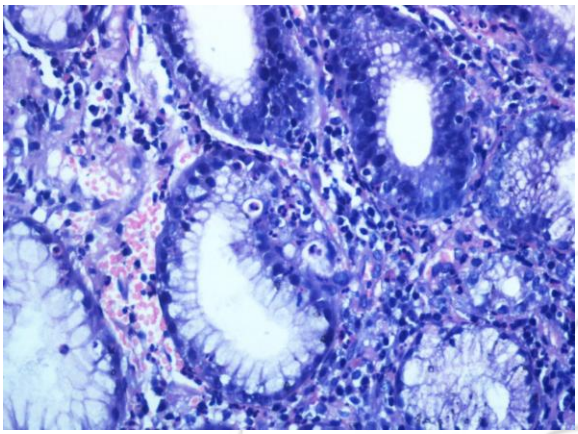

Figure 2: H&E x 400, Chronic gastritis with activity (intraepithelial neutrophils)

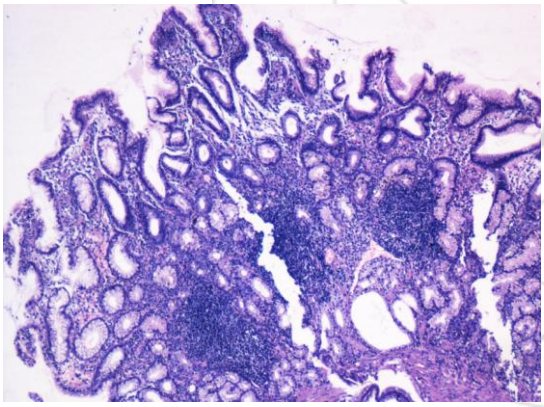

Figure 3: H&E X 20 sections shows *H.pylori* associated gastritis with hyperplastic foveolae and lymphoid follicle

4. Discussion

In our present study, the most common age group was 40 – 60 years with the mean age range of 46 years, this is consistent with studies done by Adyin et al [12]. Mustapa et al [13] who reported a mean age of 47.2and 47 years. The Male:Female ratio during this study was 3 :1. Kumar et al. also found similar M:F of 2.7:1 [14].

In this study we have concentrated only on antral biopsies since most of the studies have reported antrum as the most likely site of histopathological findings in gastritis [15]. The criteria laid down by Aydin *et al.* [12] are extremely useful in analysing the gastric biopsies for suspected gastritis.

The endoscopic findings in our study revealed the presence of erosions in 33%, duodenal ulcer in 27%, gastric ulcer in 18%, gastroduodenal ulcer in 8% and normal gastric mucosa in 12.5% of cases. This is in contradiction with Khakoo et al.[16] in which they found erythema in the majority of the cases (45.8%).In 20% of cases who were endoscopically normal, inflammation was revealed on histology; which was also observed by Khan *et al.* [17] who had 32% of patients with chronic gastritis histologically but their endoscopic findings were normal, thereby emphasizing the role of biopsy even in endoscopically normal individuals. In patients with duodenal ulcer, colonization by *H. pylori* was seen in 84.6% of cases; inflammatory infiltrate was present in all the cases with the majority (50%)) having only moderate inflammation while 36.3% had mild inflammation. A study done by Witteman *et al.* [18] observed chronic infiltrate in all biopsies but the majority had moderate inflammation which is similar to our study. In this study, the majority of patients with duodenal ulcer had more severe gastritis on histology as compared to subjects having erosions. In 33.3% of the cases, activity was seen which is in accordance with a study published by Misra *et al.[*19]. The occurrence of atrophy (6.25%) and intestinal metaplasia (6.25%) was infrequent, which was also observed in studies by Atisook et al. [20] and Nawfal *et al.* [21] Helicobacter pylori was observed in 66.6% of all the cases, which is in accordance with the studies done by Kumar *et al.*[14] and Gill *et al.[*22] which showed positivity in 78% and 65% of cases respectively.

5. Conclusion

H.pylori infection is more prevalent in developing countries like India. Early diagnosis helps in early initiation of treatment and thereby eradication of *H.pylori*. Endoscopic examination and biopsy is a convenient procedure for accurate diagnosis. Endoscopy is incomplete without biopsy and histopathology is the gold standard for the diagnosis of endoscopically detected lesions. Endoscopic biopsy correlation is important in understanding the biology and pathophysiology of the disease. Awareness of the histomorphological features that are typical of *H.pylori* gastritis would be helpful to the clinicians to identify other conditions like atrophic gastritis and intestinal metaplasia and thereby prevent the progression to carcinoma. This correlation provides new information about the prevalence of the disease and thereby assists in improving patient management.

6. Future Scope

Further studies are required with more number of subjects to establish the use of endoscopy and histopathology in the diagnosis of *H.pylori* associated gastroduodenal diseases.

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Conflict of Interest: None

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