

Gastro Esophageal Reflux Disease: Incidence of GERD in 100 Consecutive Upper G.I. Endoscopies at S.G.R.H.

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An eleven month long study (from May 98 to April 99) was carried out at the Surgical Unit I Sir Ganga Ram Hospital. This study comprised of 100 consecutive patients selected from the Surgical Outpatients Department who had symptoms of Upper GI disease. There were 43 males and 57 females in this study. 32 out of these 100 patients had Gastro Esophageal reflux disease. 30 of them improved on medical treatment. 2 were recommended surgery.

Key words: Gastro Esophageal reflux, Upper G.I. endoscopy.

Initially rigid instruments inspected the gastrointestinal tract. An Esophagoscope came in 1868 from John Bevan in England enabling foreign objects in the esophagus to be removed. That year, too, the first 'gastroscopy' of the stomach was done by an assistant to Adolf Kussmaul when he persuaded a professional sword small lenses to take in a pipe, nearly half a meter long, equipped with a lamp and lenses.¹ In 1881 Mickulicz - Radicki provided a practical instrument as well as a classic textbook.

The early gastroscopes were stiff, and caused the patient much discomfort, if not internal injury. In 1932 a German, Rudolf Schindler presented a lending gastroscope. Professor Harold Hopkins of U.K. designed useable fibroptic bundles in early 1950s² In 1958 Basil Hirschowitz, a South African spearheaded the introduction of a completely flexible gastroscope.

Gastro-Esophageal reflux disease is a common disorder, which afflicts both sexes equally. Its prevalence is relatively constant over the age of 30 and does not seem to increase with age³ Patients usually present with the complaints of heart burn, regurgitation, dysphagia. These symptoms are aggravated by posture and can be specially severe at night, after large meals and activities which increase the intra abdominal pressure e.g. bending and stooping^{4,5,6}.

There is a large no of patients in our population who present in the Surgical Outpatients department with the aforementioned complaints. Keeping this in view a prospective study was planned to evaluate the patients presenting with these complaints by upper GI endoscopy and thus establish the incidence of GERD in them.

Patients and Methods

This study was carried out at the General Operation theatre of S.G.R.H over a period of 11 months. The patients were selected from Surgical Out Patient Department of Sir Ganga Ram Hospital who had any of the following complaints i.e. epigastric pain, heartburn, regurgitation and dysphagia. 100 consecutive patients were selected. All of them were subjected to upper GI endoscopy. If the patients were found to suffer GERD they were advised Anti Reflux medication which included H₂ receptor blockers, mucosal protectors, antacids and prokinetic drugs, for a period of 3 weeks.

After 3 weeks repeat endoscopy was performed for the follow up of the patients and to determine the response

to medical treatment. If the patients failed to respond initially they were given a further trial of medical treatment for 3-6 weeks. After failure to respond to this trial the patients were advised surgery.

Results

A total of 100 patients formed the study group. Out of them 43 were male and 57 were females. The age incidence in males varied from 21 to 68 years whereas in females it was 20 to 59 years.

Both in the males and females the highest member of patients were in the age group 41-50 years (Table 1)

Table No. 1 Age and Sex Distribution

Age	Male	Female	N=
20-30	7	10	17
31-40	8	12	20
41-50	16	22	38
51-60	9	13	21
>60	3	0	3
Total	43	57	100

Out of a 100 patients 32 patients were found to have GERD. Out of these 32 patients 13 were male and 19 were female (Table 2)

Table 2. Incidence of GERD according to sex

Sex	Total No. of Pts.	Pts. With GERD	%age
Male	43	13	30.23
Female	57	19	33.33

According to Age the highest number of patients was in the age group 41-50 years, next to follow was the age group 50-60 years. (Table 3)

Table 3 Incidence of GERD according to age & sex

Age	Male	Female	Total
20-30	1	2	3
31-40	2	3	5
41-50	6	9	15
51-60	3	5	8
>60	1	0	1
Total	13	19	32

Table 4 Savary – Miller classification of GERD

Grade	Description
1	Single or isolated erosive lesion(s), oval or linear but affecting only one longitudinal fold.
2	Multiple erosive lesions, non circumferential, affecting more than one longitudinal fold.
3.	Circumferential erosive lesion. Chronic lesions: Ulcer(s), Stricture (s) and/or short Esophagus.
4.	Columuar epithelim in continuity with Z line, non circular, star shaped or circumferential.*

In our study the patients had grade II and grade III GERD mostly with one patient in grade IV and none in grade V (Table 5).

Table 5 Incidence of GERD according to Savary –Mmiller classification

Grade	Male	Female	Total
Grade I	3	3	6
Grade II	4	7	11
Grade III	6	8	14
Grade IV	0	1	1
Grade V	0	0	0
Total	13	19	32

It was noticed during our study that 57 of the 100 patients who underwent upper GI endoscopy had Acid peptic disease. 28 of the patients had both acid peptic disease and GERD. Only 4 patients had exclusively GERD. Out of the 57 patients 29 had acid peptic disease only (Table 6).

Table 6 Incidence of acid peptic disease and GERD

n=	Pts. With APD &		Pts. With APD only
	GERD	GERD only	
57	28	4	29

Out of the 32 patients who had GERD 19 recovered after 3 weeks of medical treatment. Remaining 13 were given 6 weeks of further medical treatment.

Eleven of the patients showed improvement. Two patients who were having grade III and Grade IV GERD developed deep ulcers after medical treatment and were advised surgery.

Discussion

The phenomenal growth and development of flexible fiberoptic gastrointestinal endoscopy since the 1960s has

dramatically influenced the surgical management of gastrointestinal disease⁷. A very large number of patients who present in the surgical Outpatients department have symptoms related to Upper GI disorder⁸. These patients suffer significant morbidity. A considerable amount of time and money is wasted before a final diagnosis is reached and the treatment is started. There are various reasons for not subjecting these patients to endoscopy. These include lack of facilities, lack of trained personnel and poor diagnostic skills. An early Endoscopy will save precious time and money as well as there would be a significant decrease in the morbidity^{9,10}. Moreover it will help in diagnosing malignancies of the Upper GI earlier and thus help in better management of the patients. Fibre optic Endoscopy gives direct visual information on the presence of esophagitis and its severity/complication. It is the crucial test for the detection of esophageal neoplasms^{11, 12}. We strongly recommend an early endoscopy of all the patients who present with the symptoms of upper GI disease. We also recommend training of personnel for this procedure and availability of facilities at every level. The cost effectiveness cannot be over emphasized.

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