Clinical and Diagnostic Aspects of Duodenal Ulcer in Karachi

Pages with reference to book, From 49 To 51

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Abstract

A retrospective analysis of 203 patients with duodenal ulcer revealed that age in both sexes ranged between 40-44 years and male to female ratio was 9 1. Thirty percent subjects gave history of smoking, tobacco chewing or use of naswar.* Main presenting symptoms were Epigastric pain with nausea/vomiting, 40% had haematemesis and 45% malena. Six percent had previous history of duodenal perforation. Diagnosis was made on Endoscopy in 43% and Endoscopy/Barium Meal in 27%. A good correlation was observed between the two procedures in the diagnosis of duodenal ulcer disease (JPMA 34 49, 1984).

Introduction

Variances in the prevalence of peptic ulcer are known to exist in different parts of the subcontinent (Sommervell and Orr, 1936). Peptic ulcer is believed to be different from the disease in the West in being less acute and less likely to bleed or perforate (Sommervell and Orr, 1936). An earlier study in Assam (North-east part of India) indicated that peptic ulcer in India is no different from peptic ulcer seen in West (Malhotra et al., 1964).

This study was undertaken to determine the age/sex incidence, personal habits, clinical presentation, incidence of complications and to evaluate the diagnostic methods used for confirming the diagnosis of duodenal ulcer in patients referred to the PMRC Research Centre, Karachi.

Material and Methods

Case records of 203 patient attending PMRC Research Centre, Jinnah Postgraduate Medical Centre, from 1972-1982 were studied retrospectively. Age and sex incidence, clinical presentation, personal habits i.e. smoking, tobacco chewing, naswar sniffing, charas* *and alcohol intake in patients wherever such information was available, complications and incidence of previous and present gastric surgery were studied. Clinical history and physical examination, results of barium meal examination and endoscopy findings were analysed at the time of diagnosis and after 4-6 weeks of treatment. Other investigations done weie haematological i.e. total and differential count, haemoglobin, ESR and PCV and urine analysis.

Diagnostic methods, i.e. endoscopy and barium meal examination were evaluated with regard to their accuracy and correlation of the two methods. Endoscopy and barium meal were done in patients wherever they were available, while in 54 patients radiological findings were substantiated with subsequent endoscopy. Incidence of past and present complications as well as surgical treatment, necessary in some patients, were also studied.

Results

Of 203 patients there were 181 males and 22 feniales (M:F 9:1). Mean age ranged from 40-44 years (Table I and II).

Table I

Age Incidence.

	No. of patients	Mean age
Fema	22	44
Male	181	40

Table II

Sex Incidence.

	No. of patients	Ratio
Female	22	1.0
Male	181	9.0
Total	203	1.9

History of cigarette smoking, tobacco chewing and naswar sniffing was available in 61(30%) and of taking alcohol in 14(7%) patients (Table III).

Table III

Personal Habits.

Total No. of patients	Smoking	Alcohol	Information not available
203	61	14	128

Clinical presentation has been summarised in Table IV,

Table IV Symptomatology.

Symptomatology	No. of patients	%
Epigastric pain	104	51%
Nausea/Vomiting	103	51%
Haematemesis	81	40%
Malena	92	45%
Pain-Right Hypochondrium	11	5%

epigastric pain being the most common symptom (5 1%) followed by nausea/ vomiting (50%), melena (45%) and haematemesjs (40%).
Bleeding from gastrointestinal tract was quite common (40.45%) (Table VI).

Table VI Complications.

	No. of patients	%
Haemetenesia	81	40%
Malena	92	45%
Pyloric stenosis	5	2%
Perforation	13	6%
Previous surgical treatment	28	13%

One patient continued to bleed inspire of resuscitative measures, was not fit for surgery and expired within 24 hours. Perforation occurred in 6% of the patients and 13% had surgical treatment for previous complications/recurrence of ulcers.
Clinical diagnosis of duodenal ulcer was confirmed by barium meal examination and endoscopy wherever possible. Forty three (22%) patients had barium meal examination only and endoscopy was

possible in 87 (43%) patients (Table V).

Table V

Diagnostic Methods.

	No. of patients	%
Barium Meal	43	22%
Endoscopy	87	43%
Endoscopy/Barium Meal	54	27%
Clinical Diagnosis alone	19	9%

In 54 (27%) patients both endoscopy and barium meal were done and there was a good correlation between the two investigative procedures in the diagnosis of ulcer disease. It was observed that endoscopy was carried out mcre frequently than barium meal examination, perhaps because research centre could arrange it more conveniently.

Discussion

Previous studies in India, on peptic ulcer, had indicated that the disease was very common in South India and not so elsewhere (Sommervell and Orr, 1936; Dogra, 1940; Hedley, 1959).
Duodenal ulcer -was also believed to be different from that in the West, being less acute and less likely to develop complications such as bleeding and perforation (Sommervell and Orr, 1936).
However, Malhotra et al. (1964) in their study of peptic ulcer in Assam (North east India) reported its high incidence (8.8%) in the railway workers. These figures correspond to those found by Doll et al. (1951) in their notable London survey. There was also high incidence of haemorrhage and perforation in the above series which is also seen in the West. Therefore, it was thought that ulcer seen in Assam is not very different from ulcer seen in the West but it differs from ulcer sc1*: in South India, Bengal and Bangladesh (Malhotra et al., 1964).
The present study is a retrospective analysis of duodenal ulcer patients who were residents of Karachi which is thickly populated cosmopolitan city with different types of communities having different ways of life. Peak age incidence in both sexes was 40-44 years, about 10 years younger than in the West (Tovey, 1979).
The average sex ratio (Male : Female) was 9 :1 while in the West sex ratio has steadily fallen over recent years becoming 1.9 : 1 at present (Tovey, 1979). In South India males predominate to a greater extent (16.6 : 1) (Malhotra et al., 1967).
Various studies (Chuttani et al., 1967, 1968) analysed the environmental, occupational and dietary factors as well as personal habits i.e. smoking. In this study, 30% gave history of smoking, although information was not available in 63% and it is likely that the frequency of smokers and those addicted to tobacco would have been higher if patients were questioned more discreetly.
Complications as haemorrhage presenting as haematemesis/melena was frequent and perforation was

less common, thus resembling with clinical characteristics of ulcer seen in the West (Watkinson, 1979). On the other hadn, in South India and Bangladesh, pyloric stenosis has been more commonly observed and perforation and haemorrhage were rare (Malhotra et al., 1976).

Clark (1981) had noted in his series that, unless duodenal bulb is deformed by previous ulceration and scarring, double contrast barium radiology fails to show lesions in the scarred regions and similarly, acute ulcers which are not easily visible radiologically. Endoscopy is also preferred method to assess the response to medical treatment, the drawbacks being that it can only be performed by trained personnel experienced enough to diagnose accurately, and many centres cannot afford to have fhe equipment. On the other hand, radiological findings are perhaps more diagnostic in chronic disease where scarring and deformity is pronounced; such was the case in this study where most of the patients presenting for treatment had chronic duodenal ulcer disease.

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