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Common indications for upper gastro-intestinal tract endoscopy in ECWA Hospital, Egbe, Nigeria: A preliminary report

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ABSTRACT: Background: Upper gastrointestinal tract endoscopy is a visual examination of the upper intestinal tract using a lighted, flexible fiberoptic or videoscope. Common reasons for upper gastrointestinal tract endoscopy include ulcers (benign and malignant), intestinal bleeding, oesophagitis and heartburn, gastritis etc. This study is therefore to examine the common indications for upper gastrointestinal tract endoscopy at ECWA hospital, Egbe. Kogi state.

Aim: To examine the common indications for upper gastrointestinal tract endoscopy in ECWA hospital, Egbe. Kogi state.

Methodology: A review of the indications for upper gastrointestinal tract endoscopy was undertaken to cover a six-month period from August 2004 to January 2005. The endoscopy register of the operating theatre was examined over this period. The biodata of the patients who underwent the procedure over this period was reviewed. The indications for which they underwent this procedure was also determined.

Results: A total of 49 patients had upper gastro-intestinal tract endoscopy done on them during the period under review. The endoscopy indication was diagnostic in all patients. 20 of the patients were males (40.8%) while 29 were females (59.2%). Peptic ulcer disease, 29 patients (59.1%); gastro-oesophageal reflux disease, 9 patients (18.4%); gastric cancer, 3 patients (6.1%); chest pain, 2 patients (4.1%); anxiety neurosis, 2 patients (4.1%); dysphagia, 1 patient (2.0%); gastritis, 1 patient (2.0%); severe anaemia, 1 patient (2.0%); and upper gastro-intestinal tract bleeding, 1 patient (2.0%).

Conclusion: The common indications for upper gastro-intestinal tract endoscopy in ECWA hospital, Egbe is similar to those of other centres in Nigeria.

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Introduction

Upper gastro-intestinal (GI) endoscopy, sometimes called oesophago-gastroduodenoscopy is a visual examination of the upper intestinal tract using a lighted, flexible fibreoptic or video endoscope. The upper gastrointestinal tract begins with the mouth and continues with the oesophagus, the J-shaped stomach and ends in the duodenum^{1,2}.

Equipment

The flexible endoscope is a remarkable piece of equipment that can be directed and moved around the many bends in the GI tract. Endoscopes come in two types. The original pure fibreoptic instrument has a flexible bundle of glass fibres that collect the lighted image at one end and transfer the image to the eye piece. The newer video endoscopes have a tiny, optically sensitive computer chip at the end. Electrical signals are then transmitted up the scope to the computer which then displays the image on a large video screen. An open channel in these scopes allow other instruments to be passed through in order to take tissue samples, remove polyps and perform other exams^{1,2}.

Indications for upper GI endoscopy

Due to factors related to diet, environment and heredity, the upper GI tract is the site of numerous disorders. The indications include:

- (i) Ulcers; which can develop in the oesophagus, stomach or duodenum. Occasionally ulcers can be malignant tumours of the stomach or oesophagus.
- (ii) Bleeding
- (iii) Inflammation: oesophagitis, gastritis, duodenitis
- (iv) Polyps etc.^{1,2}

The procedure

Upper GI endoscopy is usually performed on an out-patient basis. It is performed primarily for diagnostic and/ or therapeutic reasons. The throat is often anaesthetized by a spray or liquid. Intravenous sedation is usually given to relax the patient, deaden the gag reflex and cause short term amnesia. For some individuals who can relax, and whose gagging can be controlled, the exam is done without intravenous medication. The endoscope is then gently inserted into the upper oesophagus. Other instruments can be passed through the endoscope to perform additional procedures if necessary such as to obtain a biopsy specimen, and removal of a polyp or tumour.

The exam takes from 15 to 30 minutes.

Side effects and risks

A temporary, mild throat irritation sometimes occurs after the exam. Serious risks are very uncommon. One such is excessive bleeding, especially with removal of a large polyp. Others are perforation or tear. Quite uncommonly, a diagnostic error or oversight may occur.^{1,2}

Materials and Methods

The study was a retrospective one. A review of the indications for upper GI endoscopy was undertaken to cover a six- month period from August 2004 to January 2005.

The Endoscopy register of the operating theatre was examined over this period. The bio-data of the patients who underwent upper GI endoscopy over this period was reviewed. The indications for which they underwent this procedure was also determined.

The upper GI endoscope in use at the endoscopy unit of the hospital is Olympus GIF P10 model with an Olympus CLE-10 light source. The data obtained from this was analysed.

Setting of the study

The setting of the study is ECWA hospital, Egbe. It is a mission hospital established in 1952. Egbe is a junctional town located about 200 kilometres from Lokoja, the Kogi state capital and 130 kilometres from Ilorin the Kwara state capital. Patients attend the hospital mainly from neighbouring towns and villages from Kogi and Kwara states³.

Analysis

The data obtained was entered into a computer using the Epi-info version 6.1 statistical software for analysis

Results

At the conclusion of the study, a total of forty-nine patients were found to have undergone upper GI endoscopy.

Demographic data of the patients

Age

The ages ranged from 12-90 years with a mean of 47.7 ± 18.5 years. Thirteen (26.5%) of the patients were in the age group 40-49 years i.e fifth decade of life. Twenty-four (48.9%) of the patients were in the age group 40-59 years. Most of the patients were in the middle age of life. There was an increase in the age of the patients up to the middle age with a decline towards the tenth decade (Table 1).

Table 1: Age Groups

Age groups (Years)	Frequency	Percent	Cumulative %
10 – 19	3	6.1	6.1
20 – 29	7	14.3	20.4
30 – 39	3	6.1	26.5
40 – 49	13	26.5	53.1
50 – 59	11	22.4	75.5
60 – 69	5	10.2	85.7
70 – 79	4	8.2	93.9
80 – 89	1	2.0	95.9
90 – 99	2	4.1	100
Total	49	100	

Sex

Twenty of the patients were males (40.8%) while twenty-nine were females (59.2%) giving a male to female ratio of 1:1.45 (Table 2).

Table 2: Sex distribution of patients.

Sex	Frequency	Percent	Cumulative %
Male	20	40.8	40.8
Female	29	59.2	100.0
Total	49	100.0	

Indications for upper GI endoscopy

Twenty-nine patients (59.1%) underwent upper GI endoscopy because of peptic ulcer disease (PUD). Nine patients (18.4%) on account of gastro-oesophageal reflux disease (GERD). Three patients (6.1%) on account of gastric carcinoma. Two patients each (4.1%) on account of chest pain, and anxiety neurosis. One patient each (2.0%) on account of dysphagia, gastritis, severe anaemia, and gastro-intestinal bleed (Table 3).

Table 3: Indications for upper GI endoscopy.

Indications	Frequency	Percent	Cumulative %
PUD	29	59.1	59.1
GERD	9	18.4	77.5
Gastric cancer	3	6.1	83.6
Chest pain	2	4.1	87.7
Anxiety neurosis	2	4.1	91.8
Dysphagia	1	2.0	93.8
Gastritis	1	2.0	95.8
Severe anaemia	1	2.0	97.8
Upper GI bleed	1	2.0	100.0
Total	49	100	

PUD = Peptic Ulcer Disease

GERD = Gastro-Oesophageal Reflux Disease.

Discussion

A review of the literature shows that upper GI tract endoscopy has been widely available in Nigeria as a diagnostic tool for common gastrointestinal disorders for some time now^{4,5,6}. From this study, the mean age of the patients who underwent upper GI endoscopy was 47.7 years. This is higher than the mean age of 37.8 years in patients of Danbauchi *et al* in Zaria⁴. It is also higher than the mean age of 40.5 years found by Khurram *et al* in their patients⁷. It is also higher than the mean age of 39.3 years found by Samaila *et al*⁸ in Katsina. From this study also, most of the patients were in their fifth decade of life i.e 40-49 years. This is similar to those of Danbauchi *et al* who were in their fourth and fifth decades of life⁴.

From this study, more female patients underwent upper GI endoscopy in the period under review with a male to female ratio of 1:1.45. This is similar to that found by Khurram *et al*⁷ amongst their patients with a male to female ratio of 1:1.4. It is however different from that by Danbauchi *et al*⁴ who had a male to female ratio of 1.5:1.

The commonest indication for which patients were referred for upper GI endoscopy in this study was for peptic ulcer disease 59.1%. This is similar to that found by Samaila *et al*⁸ in Katsina amongst their patients who underwent upper GI endoscopy. The commonest indication for the procedure was peptic ulcer disease (PUD) although they found a higher value of 90.4%. This differs from the dyspepsia that was the commonest reason in Zaria found by Danbauchi *et al*⁴ and Malu *et al*⁵. It also differs from the Dyspepsia found to be the commonest indication for referral for upper GI endoscopy ie 42.1% found in Pakistan in the work of Khurram *et al*. The differences might be because of the obvious differences in sample size, the average age of the patients studied, the geographical locations, and period of time under review and the fact that most peptic ulcer disease patients present with dyspeptic symptoms.

Conclusion

The commonest indication for referral for upper GI endoscopy in Egbe is similar to those of other centres.

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