**INDICATIONS FOR OESOPHAGOGASTRODUODENOSCOPY IN ILORIN, NIGERIA- A 30 MONTH REVIEW**

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**ABSTRACT**

**Background:** Oesophagogastroduodenoscopy is one of the most commonly performed endoscopic procedures. Properly performed, it provides valuable information in patients with upper gastrointestinal conditions. Oesophagogastroduodenoscopy is a visual examination of the upper intestinal tract using a lighted, flexible fiberoptic endoscope or videoscope. Oesophagogastroduodenoscopy is generally indicated for evaluating upper abdominal symptoms such as dysphagia or odynophagia, oesophageal reflux symptoms, gastroduodenal or oesophageal ulcer, upper tract stricture or obstruction, gastrointestinal bleeding, persistent vomiting of unknown cause etc.

This study is therefore to review the indications for oesophagogastroduodenoscopy in Ilorin, Nigeria.

**Aim:** To review the indications for oesophagogastroduodenoscopy in Ilorin, Nigeria.

**Methodology:** A review of the indications for oesophagogastroduodenoscopy was undertaken to cover a thirty-month period from June 2006 to November 2008. 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.

**Results:** A total of 206 patients had oesophagogastroduodenoscopy done on them during the period under review. 124 of the patients were males (60.2%) while 82 were females (39.8%).

The indications for oesophagogastroduodenoscopy were dyspepsia, 94 patients (45.6%); upper gastrointestinal tract bleed, 54 patients (26.2%); gastric outlet obstruction, 12 patients (5.8%); gastric cancer, 11 patients (5.3%); dysphagia, 9 patients (4.3%); acute exacerbation of peptic ulcer disease, 8 patients (3.8%); gastro-oesophageal reflux disease, 7 patients (3.4%); recurrent vomiting, 3 patients (1.5%); bloody stool, 2 patients (1.0%); epigastric mass, 2 patients (1.0%); 1 patient (0.5%) each on account of excessive salivation, foreign body ingestion, ingestion of corrosive, and recurrent anaemia.

**Conclusion:** The commonest indication for oesophagogastroduodenoscopy in Ilorin is dyspepsia.

**Key Words:** Indications, Oesophagogastroduodenoscopy, Ilorin

(Accepted 16 June 2009)
The oesophagogastroduodenoscope in use at the endoscopy unit of the hospital is Olympus GIF - XQ10 model with an Olympus ILK-CLK 3-4 light source, and a Pentax EG-2731 with a Pentax EPM-3300 videoscope. The data obtained from this was analysed using SPSS 10 statistical software.

RESULTS
At the conclusion of the study, a total of two hundred and six patients were found to have undergone OGD.

Demographic data of the patients
Age
The ages ranged from 7-85 years with a mean of 47.4+/−15.7 years. There was a steady increase in the age of the patients up to the fifth decade with a decline towards the ninth decade. See Table 1.

Sex
One hundred and twenty-four of the patients were males (60.2%) while eighty-two were females (39.8%) giving a male to female ratio of 1.5:1.

Indications for oesophagogastroduodenoscopy
The indications for OGD were dyspepsia, 94 patients (45.6%); upper gastrointestinal tract bleed, 54 patients (26.2%); gastric outlet obstruction, 12 patients (5.8%); gastric cancer, 11 patients (5.3%); dysphagia, 9 patients (4.3%); acute exacerbation of peptic ulcer disease, 8 patients (3.8%); gastro-oesophageal reflux disease, 7 patients (3.4%); recurrent vomiting, 3 patients (1.5%); bloody stool, 2 patients (1.0%); epigastric mass, 2 patients (1.0%); 1 patient (0.5%) each on account of excessive salivation, foreign body ingestion, ingestion of corrosive, and recurrent anaemia. See Table 2.
DISCUSSION

A review of the literature shows that OGD has been widely available in Nigeria as a diagnostic tool for common gastrointestinal disorders for some time now\(^\text{i}\)-\(^\text{i}\). From this study, the mean age of the patients who underwent OGD was 47.4 years. This is similar to the mean age of 47.7 years found by Olokoba et al\(^\text{ii}\) in their patients in Egbe, North central, Nigeria. It is however slightly higher than the mean age of 46 years in the work of Al-Quorain et al\(^\text{v}\) in their Saudi patients in the eastern province of Saudi Arabia, and the mean age of 45 years found by Agbakwuru et al\(^\text{vi}\) in Ife, South western, Nigeria. The mean age of 47.4 years from this study is also higher than the mean age of 37.8 years found by Danbauchi et al\(^\text{v}\) in Zaria, North western, Nigeria; and the mean age of 40.5 years found by Khurram et al\(^\text{vi}\) in their Pakistani patients. Similarly, it is higher than the mean age of 39.3 years found by Samaila et al\(^\text{vii}\) in Katsina, North western, Nigeria; the 43.5 years found by Aduful et al\(^\text{viii}\) in their Ghanaian patients; and the 36 years found by Taye et al\(^\text{ix}\) in their Ethiopian patients. The mean age of 47.4 years is however lower than the 56.4 years found by Irabor\(^\text{x}\) in their patients in Ibadan.

From this study, the next most common indication for OGD is upper gastrointestinal bleeding. This is also

<table>
<thead>
<tr>
<th>Indications</th>
<th>Frequency</th>
<th>Percent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyspepsia</td>
<td>Male (n)</td>
<td>Female (n)</td>
<td>Male (%)</td>
</tr>
<tr>
<td>UGI bleed</td>
<td>50</td>
<td>44</td>
<td>24.3</td>
</tr>
<tr>
<td>GOO</td>
<td>42</td>
<td>12</td>
<td>20.4</td>
</tr>
<tr>
<td>Gastric cancer</td>
<td>10</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>Dysphagia</td>
<td>8</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>PUD</td>
<td>5</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>GORD</td>
<td>3</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>Recurrent vomiting</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Epigastric mass</td>
<td>2</td>
<td>0</td>
<td>1.0</td>
</tr>
<tr>
<td>Bloody diarrhoea</td>
<td>2</td>
<td>0</td>
<td>1.0</td>
</tr>
<tr>
<td>Excessive salivation</td>
<td>0</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Ingestion of corrosive</td>
<td>1</td>
<td>0</td>
<td>0.5</td>
</tr>
<tr>
<td>Foreign body ingestion</td>
<td>1</td>
<td>0</td>
<td>0.5</td>
</tr>
<tr>
<td>Recurrent anaemia</td>
<td>0</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td>79</td>
<td>62.9</td>
</tr>
</tbody>
</table>

Key:
UGI = Upper gastrointestinal tract
GOO = Gastric outlet obstruction
PUD = Peptic ulcer disease
GORD = Gastro-oesophageal reflux disease

\(^{1}\)who found more male patients in their study in Zaria, North western, Nigeria. More male patients were also found to have undergone OGD in the works of Agbakwuru et al\(^{1}\) (53.4%), Al-Quorain et al\(^{4}\) (67.4%), Taye et al\(^{1}\) (male:female, 2:1) and Irabor\(^{1}\) (male:female, 1.6:1). It is however different from that by Khurram et al\(^{1}\) who had a male to female ratio of 1:1.4. The differences in the mean age of the patients studied, and the differences in the ratio of male to female patients studied may be because of the obvious differences in sample size, the average age of the patients studied, the different geographical locations, and period of time when the studies were carried out.

The commonest indication for which patients were referred for OGD in this study was dyspepsia, 45.6%. This is similar to the dyspepsia that was the commonest reason for referral for OGD in Zaria found by Danbauchi et al\(^{1}\) and Malu et al\(^{1}\) (78.1%). It is also similar to the Dyspepsia found to be the commonest indication for referral for OGD (42.6%) in the work of Khurram et al\(^{1}\), and that of Onyekwere et al\(^{1}\) in Lagos, Nigeria. Dyspepsia was also the commonest reason for OGD found by Taye et al\(^{1}\). This is however different from the acute exacerbation of peptic ulcer disease (PUD) that was the commonest indication for referral for the procedure in Katsina by Samaila et al\(^{1}\) (90.4%), that found in Ife by Agbakwuru et al\(^{1}\) (67.6%), and that found by Olokoba et al\(^{1}\) in Egbe (59.1%). The differences in the commonest indication may be the fact that most peptic ulcer disease patients present with dyspepsia. It may also be due to differences in the terminologies used.

From this study, the next most common indication for OGD is upper gastrointestinal bleeding. This is also
the next most common indication for OGD as seen in the works of Khurram et al (32.8%), Taye et al (18.0%), Aduful et al (14.2%), Malu et al (12.1%), and Onyekwere et al.

Other indications for OGD found in this study are in the evaluation of patients with gastric outlet obstruction (GOO), gastric cancer, dysphagia, acute exacerbation of peptic ulcer disease, GORD etc, as shown in Table 2. These are also some of the indications for the procedures as found by other workers such as Khurram et al, Aduful et al, Malu et al, Taye et al, Olokoba et al, and Samaila et al.

The indications for OGD in Ilorin are therefore similar to that of other centres within and outside Nigeria.

CONCLUSION

The indications for referral for OGD in Ilorin are similar to that of other centres within and outside Nigeria. Dyspepsia is the commonest indication for OGD in Ilorin, Nigeria.

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