

Our Experience with Endoscopic Finding in a Tertiary Care Centre in Jharkhand, India

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Abstract: *In the Jharkhand state of India, Rajendra Institute Of Medical Sciences, Ranchi is a growing institute. In the department of general surgery we have endoscopy section running for about last five years. Earlier we were doing 10-15 cases per month. As the confidence of the surgeon and the colleagues (who were referring for endoscopy) increased, the average number of endoscopic procedure also increased. We are doing only diagnostic oesophago-gastro-duodenoscopy (OGD/EGD) or Upper G.I. Endoscopy and Colonoscopy at present. Endoscopy is an important invasive diagnostic tool. Present study is about our experience with findings by using this newer diagnostic tool.*

Keywords: Upper G.I. Endoscopy, Colonoscopy, Finding

1. Introduction

Endoscope is an instrument used for direct visualization of hollow organs or body cavities. Specially designed endoscopes are used for such examination as cystoscopy, bronchoscopy, gastroscopy etc. The equipment has two sections—(1) the main body including the central processing unit, light source and monitor (2) the endoscope. The components of the endoscope are control section, optical fibres to carry light from light source (xenon etc) to the tip of scope and also transfer the images from camera fitted at the tip, to the central processing unit; different channels for different types of functions like suction or to take tissue biopsy. The optical fibres and the channels are encased in a sheath which makes the shaft and this part is actually inserted into the patient for diagnosis or for therapeutic purpose. The present study is on our experience with this relatively newer instrument. We are doing oesophago-gastro-duodenoscopy (EGD/ (OGD) and colonoscopy. Our findings are presented in tables.

2. Material and Method

Patients admitted in different departments of RIMS, RANCHI who were sent for endoscopic examination in the department of surgery includes the study material. The period was from June 2018 to February 2020. As the facility of endoscopy is available in the department of surgery, most of the patients were from the surgery department.

EGD is an invasive procedure and is done by one man method. Posture of the patient is usually left lateral but sometimes in case of hemiplegia, quadriplegia or in tracheotomy the patient is kept on supine position to do endoscopy. We generally use 2% xylocaine for laryngopharyngeal spray to locally anaesthetize to do oesophago-gastro-duodenoscopy procedure (UPPER G.I ENDOSCOPY). We advise the patient to come for the procedure with fasting for at least 8 hours and remained fasting for one hour after the procedure. Patient is kept in left lateral position and neck is slightly extended with mouth gag in position. Surgeon is standing on the left side of

patient and monitor is kept at head end and slightly right to the patient facing towards surgeon.

Colonoscopy- For colonoscopy also the patient is lying on left lateral position with xylocaine 2% jelly. This is done by two man method. To prepare the patient for colonoscopy, we kept the patient on liquid diet for three days. The day before the procedure patient is given PEGLEC (polyethylene glycol electrolyte solution) to make it one litre with water and drink it. On the day of colonoscopy, patient should be in a fasting stage. We do digital rectal examination prior to colonoscopy.

Informed Consent- From every patient informed consent was taken. The components of the informed consent process include a discussion of the benefits and alternatives to the procedure, as well as a discussion of the known risks of the procedure.

3. Objectives

Objectives is to determine the demographic characteristics of adults who had upper G.I. endoscopy and colonoscopy from June 2019 to February 2020 at RIMS, RANCHI as well as to determine the prevalence of upper and lower G.I. lesions in the adult population.

Inclusion Criteria

Only adult patients were taken for our study.

Exclusion Criteria

Paediatric patients were excluded in our study.

4. Observation

Table I

Type of Endoscopy	Total No. of Procedure	Male	Female	Percentage
Upper G.I. Endoscopy	179	102	77	82.49%
Lower G.I. Endoscopy	38	22	16	17.51
Total	217	124	93	100

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Table showing total procedure in the study period starting from June 2018 to February 2020

Table II

Upper G.I.Finding	Male	Female	Total	Percentage
Normal Finding	19	17	36	20.11
Erosion	34	22	56	31.28
Ulcer	15	19	34	18.99
Mass	19	11	30	16.76
Ulceroproliferative Lesion	14	08	22	12.29
Linitis Plastica	01	00	01	0.57
	102	77	179	100

Table shows different types of lesion in Oesophago-gastro-duodenoscopy.

Table III

Colonoscopic Finding	Male	Female	Total	Percentage
Normal Finding	5	2	07	18.42
Polyps	2	1	03	07.89
Ulcer	3	2	05	13.16
Mass	6	7	13	34.21
Circumferential Growth	6	4	10	26.32
Total	22	16	38	100

Table showing different types of colonoscopic lesions.

5. Result

A total of 217 patient's gastrointestinal tract was examined endoscopically. Out of this, 179 patients were examined oesophago gastro duodenoscopy and 38 were examined by colonoscopy. Age of patients ranges from 17 to 80 years. The mean age was 48.5 years.

Indications for oesophago-gastro –duodenoscopy was epigastric pain (about 54%), dyspepsia (22%), recurrent abdominal pain (10%), haematemesis (7%) and recurrent vomiting (7%).

In upper G.I. endoscopy 34 patients had gastric ulcer. All patients underwent H. pylori kit test. Twelve patients had positive result (35.29%). Out of 179 patients, 102 patients were male and 77 patients were female. Most of the patient who underwent upper G.I. endoscopy had gastric erosion (31.28%). Second common finding was ulcer 18.99%. Other findings were mass (16.76%), ulceroproliferative lesion 12.29% and linitis plastica 0.57%. Total ulcer patients were 34, in which gastric ulcer was found in 19 patients and duodenal ulcer in 15 patients. Biopsy was taken from total 91 patients (50.84%) and tissue was sent for histopathological examination.

Indications for colonoscopy was bleeding per rectum (about 42%), pain abdomen (21%), constipation (16%), faecal occult blood test positive (16%), melena (13%), mass coming out per anus (5%), and unintentional weight loss (5%). This study had patients with more than one indication for colonoscopy.

The findings of colonoscopy are mass (mainly rectal) 34.21%, circumferential growth was 26.32%. Ulcer was found in 13.16% of total patients. Polyp was found in 7.89% of total patients examined colonoscopically. In

18.42% of patients, finding was normal. In colonoscopy, biopsy was taken from 29 patients (76.31%).

Total biopsy taken was 120 in both the procedures, overall percentage was 55.30. Among 120 samples, 112 samples were with definitive result but 8 samples were inconclusive, for this we had done repeat biopsy. Out of 8 patients who undergone for repeat biopsy 3 were positive for malignancy and other 5 had normal finding.

6. Discussion

Clear endoscopic finding is depended on good G.I. T. preparation. Proper and timely use of suction and air insufflations and use of flushing by water is an important factor for good visualization of mucosal surface of G.I.T. In our study we had 35.03 % malignant cases and benign cases were 64.97% and in 19.81% of patients, the result was normal. We are under testing / investigating our dyspeptic patients. So we can conclude by saying that we have to increase our suspicion index for early and correct diagnosis by using facility like chromoendoscopy and narrow band imaging.

References

- [1] Sleisenger and Fordtran's Gastrointestinal and Liver Disease, 8th edition, page- 831.
- [2] Armando Peixoto, Marco Silva et al. Biopsies in Gastrointestinal Endoscopy: when and how. Portuguese Journal of Gastroenterology. 2016 Jan-Feb 23(1):19-27.
- [3] Linlin Zhu et al, Early Gastric cancer: Current advances of endoscopic diagnosis and treatment. Gastroenterology research and practice, volume 2016, Article ID. 9638041
- [4] Choi C H, Jung S A, Lee B I et al. Diagnostic guidelines of ulcerative colitis, Korean Journal of Gastroenterology 2009, 53:145-160. [PubMed] [Google Scholar]
- [5] Sisir kumar Saha, J of the Indian Medical Association. vol.107, number 04, APRIL 2009, ISSN 0019-5847.
- [6] Shah S S, Bhatia S J, Mistry F P, Epidemiology of dyspepsia in the general population in Mumbai. Indian J. of Gastroenterology 2001 May 20(3):103-106 [PubMed] [Google Scholar]
- [7] Reed W P, Kilkenny J W, Dias C E et al, A prospective analysis of 3525 oesophagogastroduodenoscopies performed by surgeon. Surg. Endosc. 2004 Jan. 18(1):11-21 [PubMed] [Google Scholar]
- [8] Ogwang D M, Dyspepsia : endoscopy finding in Uganda. Tropical Doctor 2003, 33:175-177. [PubMed]
- [9] [Google Scholar] Endoscopy ; Relevance of Negative Findings. Ital. J. Gastroenterol Hepatol. 1999 Nov. 31(8):761-72.
- [10] Cooper G S, Indication and contraindications for upper gastrointestinal endoscopy. Gastrointest Endosc. Clin. N America 1994, Jul-4(3):439-54. PMID-8069470.
- [11] Vital G C, Davis B R. Trans T C. The advancing art and science of endoscopy. AM. J. of Surgery 2005 Aug 190(2):228-33. [PMID 16023436.
- [12] Bachan II, Potential for diagnostic endoscopy of the upper digestive tract. Khirurgiia (mask) 1986 April (4)134-8. [PMID 3520106]

- [13] Seung -Hwa Lee, Young -Kyu Park et al, Technical skill and training of upper gastrointestinal endoscope for new beginners. World J of Gastroenterology 2015 Jan 21(3):759-785.
- [14] Jun-Liang Teh, Asim Shabbir, Soon Yuen, Jimmy Bok – Yan So . Recent advances in diagnostic upper endoscopy. World J of Gastroenerology 26 (4)433,2020.