Threshold Age for Doing Upper Gastrointestinal Tract Endoscopy to Screen Early Gastric Carcinoma of Bangladeshi Dyspeptic Patients: 40 years vs. 60 years

Dyspepsia is a Greek word for "bad digestion". Dyspepsia means a symptom or set of symptoms that is considered to arise from the gastroduodenal regions. The dyspeptic symptoms are upper abdominal pain, epigastric burning, postprandial fullness, early satiety, bloating, belching, discomfort, nausea, and vomiting. Dyspepsia for more than 4 weeks needs extensive clinical evaluation.[1] Worldwide prevalence of dyspepsia is 30%.[1] the prevalence of dyspepsia in the general population is 41% in Bangladesh.[2] Among the uninvestigated dyspepsia 3o% is due to organic causes.[1] Gastroduodenal and pancreatic biliary disorders are the main culprit of gastrointestinal dyspepsia.

ACG (American College of Gastroenterology) and CAG (Canadian Association of Gastroenterology) recommend age cut off 60 years and older as an alarming symptom of dyspepsia. Whereas in the NICE (National Institute for Health and Care Excellence) guideline the age threshold is 55 years old or over. Other alarm features of dyspepsia are gastrointestinal bleeding or anaemia, progressive dysphagia or odynophagia, persistent vomiting, unintentional weight loss, family history of gastric or esophageal carcinoma, palpable lump or lymph node or imaging abnormality and history of drugs (NSAIDS, Aspirin).[1] Upper GI endoscopy is mandatory for dyspeptic patients who have alarm symptoms. Sixty percent of gastric carcinoma patients have dyspepsia. Cancers of the stomach are more frequently diagnosed in developed nations and predominantly in older age. In Bangladesh and India, the gastric cancer incidence and mortality has increased possibly due to aging of our population as well as improved diagnostic facilities. Survival rate of gastric carcinoma in our country have remained low. Significant numbers of carcinoma stomach in age less than 40 years have been observed in east and East Asia.

A study was carried out by Islam et al. to find out patterns of gastric malignancies in Bangladesh. Among 1543 endoscopic gastric samples from malignancy suspected patients, 625 was adenocarcinoma of which the mean age was 43.14 year.[3]

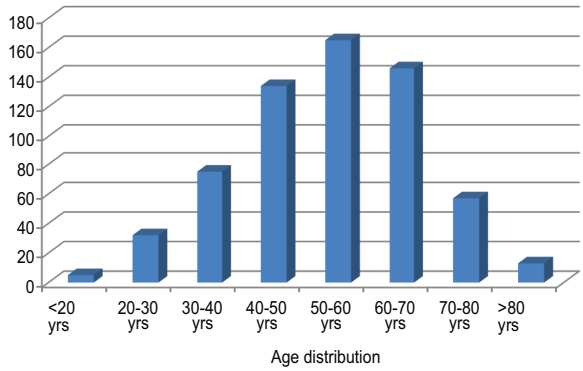

Fig.-1: *Age distribution for gastric adenocarcinoma (n=625) (Source: Islam et al., 2009)*[4]

In Indian subcontinent, *H. pylori* infection prevalence is high, but incidence of gastric cancer is lower than east where the incidence of H pylori infection is low. However, the incidence of younger age carcinoma stomach is similar to the east. The age recommendation of the west to do upper GI endoscopy is 60 years and older.[1] On the contrary the age cut off to do upper GI tract endoscopy in the east is 40 years and older.[5]

Table-I: Dyspepsia and Gastric carcinoma; Bangladesh vs. East vs. West[3-5]

Characteristics	Bangladesh	India	West	East
Prevalence of Dyspepsia	41%	30%	20-40%	5-30%
H. pylori Prevalence	90%(Healthy)	80%(Healthy)	20-40%	>50%
Gastric Carcinoma/1 lac	4.8	4.5	5	32
Carcinoma stomach in age<40 years	17.92%	14.4%	<1%	15%
5 years survival of Gastric Carcinoma	12.5%	6%	30%	60%
Recommendation age cut off of endoscopy	>40 Years?	>40 Years?	>60 Years	>40Years

Endoscopy allows direct visual examination of the gastric mucosa, and it allows for biopsy and histologic evaluation. In Japan, screening for gastric cancer is done annually for all residents aged 40 years and older with upper gastrointestinal (UGI) series which was initiated in 1983.[5] Similarly, in Korea, endoscopy or UGI series is recommended every two years for individuals aged 40 years and older.[5]

Young age gastric carcinoma frequency in Bangladesh is more. So the age cut off for doing upper GI endoscopy to diagnose early gastric carcinoma in Bangladeshi dyspeptic patients should be 40 years. Early gastric carcinoma can be treated endoscopically and prognosis is good. In Bangladesh, it requires a single time visit only to specialists to do upper GI endoscopy. It does not need to repeat endoscopy if already done in the last 2 years unless worsening symptoms.

Mugda Med Coll J. 2022; 5(1): 1-2

Nikhil Chandra Nath
Associate Professor and Head,
Department of Gastroenterology,
Mugda Medical College, Dhaka-1214

REFERENCES

1. Pulanic ì R. Epidemiology. In: Duvnjak M, editor. Dyspepsia in Clinical Practice. Springer; 2011:161-173.
2. Hasan M, Khan AKA, Roy PK, Huq KM. Peptic Ulcer in Bangladesh. Bangladesh Med Res Counc Bull. 1987;13:29-42.
3. Islam SMJ, Ali SM, Ahmed S, Afroz QD, Chowdhury R, Huda M. Histopathologic pattern of gastric carcinoma in Bangladesh. JAFMC Bangladesh. 2009;5(1):21-24.
4. Global Cancer Observatory, Bangladesh. 2020. Available from: https://gco.iarc.fr/today/data/factsheets/populations/50-bangladesh-fact-sheets.pdf (Accessed December 12, 2021).
5. Rawla P, Barsouk A. Epidemiology of gastric cancer: global trends, risk factors and prevention. Prz Gastroenterol. 2019;14(1):26-38.