



## A CASE REPORT OF AN ACQUIRED DOUBLE PYLORUS IN A NIGERIAN PATIENT

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### ABSTRACT

An acquired double pylorus is a rare complication of peptic ulcer disease that is seen in only about 0.04 % of all upper GI endoscopies. It usually occurs as a result of a penetrating ulcer into duodenum which case it's called an acquired gastro duodenal fistula. A double pylorus may occasionally be a congenital occurrence. We present a case of a 57 year old Nigerian who came in with upper GI bleeding and epigastric pain following ingestion of Non-steroidal anti-inflammatory drug (NSAID) for a dislocated joint. He was treated with proton pump inhibitors and patient improved and was discharged.

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### INTRODUCTION

A gastroduodenal fistula is a rare complication of peptic ulcer disease which occurs as a result of penetration of gastric ulcers usually of the lesser curvature of the stomachs antrum into the bulb of the duodenum or a duodenal ulcer into the antrum of the stomach (Arhan *et al.*, 2010). It may occasionally be congenital, in which case it occurs with other congenital abnormalities (Hu, 2001). In a majority of cases medication with acid suppressants is sufficient to treat the patients and surgery is rarely required. In this article we describe one case of acquired double pylorus. This is the first report in a Nigerian patient and we discuss the relationship to the presence of both a gastric antral ulcer and a duodenal ulcer.

### CASE REPORT

A 54 year old male patient referred to our facility with history of hematemesis and melena, 24hours prior to presentation. He also had a positive history of epigastric pain that was burning in nature. He had ingested NSAID for a dislocated wrist joint.

There was a past history of an upper GI bleeding in the past, about ten years ago. Patient had an endoscopy then which revealed a duodenal ulcer. His physical examination was unremarkable and he had a stable cardiovascular status. His Haemogram was essentially Normal at admission and at the time of discharge it was 13g. He had an upper GI gastroscopy at presentation in our facility with an Exerra GIF 160 Olympus gastroscope and pharyngeal spray with 10% lidocaine. The esophagus was essentially normal a few erosions were noted on the body of the stomach while in the antral region there were two openings into the duodenum (Fig1). The two openings were both intubated and each lead into the first part of the duodenum. There was an ulcer adjacent to the accessory opening (Fig. 1.) and another ulcer in the duodenum of the patient (Fig. 2). Biopsies were taken from the ulcer base which revealed presence of feature chronic active gastritis. There was no active bleeding at the time of gastroscopy and therefore no intervention was done. The patient was subsequently placed on a continuous infusion of omeprazole IV and then later on oral omeprazole. At follow up visit there was no reoccurrence of symptoms and patient declined a repeat gastroscopy.

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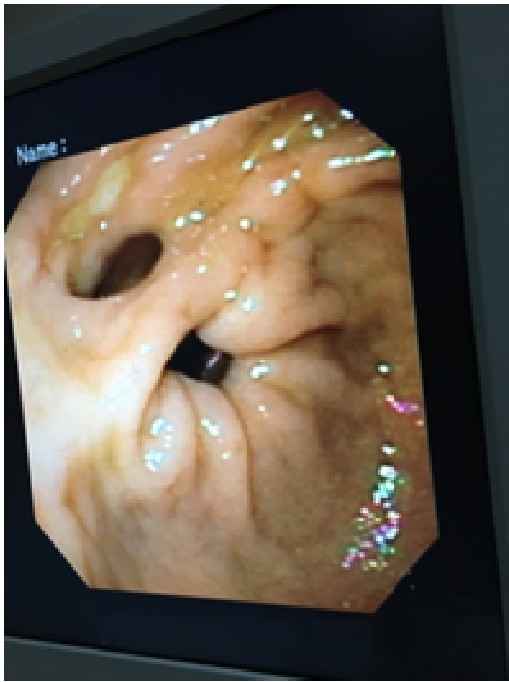


Figure 1. Endoscopy image showing double pyloric opening



Figure 2. A duodenal ulcer in the first part of the duodenum

## DISCUSSION

The real incidence rate of the condition remains unknown however it has prevalence between 0.06. to 0.4% (Al-Mofleh, 1998). This entity is said to occur commonly in males than females (Hu, 2001), the index case was also male. This patient's case is likely to be a case of acquired of gastro duodenal fistula, because of the presence of an ulcer at endoscopy and the history of a previous endoscopy done elsewhere which revealed a duodenal ulcer then. It appears there was no fistula at the time of the previous study since patient was not told about it but was informed of the presence of a duodenal ulcer. Also there are no associated congenital abnormalities in this patient, which would have been in keeping with a congenital form.

The presence of a duodenal ulcer may be associated with the development of this fistula as is the case in this patient .Some other authors have also reported the occurrence of this clinical condition in association with the presence of a duodenal ulcer (Lei *et al.*, 2016). There was an ulcer also at the opening of the accessory channel Fig 2, this has also been reported in previous studies (Hu, 2001).Therefore in this case report the patient had both a duodenal and gastric ulcer occurring at the same time, this is an even rarer finding (Hunt *et al.*, 1978). The occurrence of these fistulae is thought to be as a result of a penetration of the muscular is layer by either a duodenal ulcer at the bulb of the duodenum or a pyloric ulcer into the first part of the duodenum (Chen *et al.*, 2012). Biopsy of the ulcer did not show malignant cells or H.pylori. There were inflammatory cells in keeping with chronic gastritis. This patient was treated with proton pump inhibitors and was asked to stop ingesting NSAID which was the probable cause of the insult. Some authors have considered possible etiology for double pylorus to be the presence of diabetes mellitus, SLE and radiotherapy among other things (Hu *et al.*, 1995; Ehrhardt, 1999; Fattahi, 2012). His symptoms improved and he declined a repeat check endoscopy at follow up visit. There have also been reports of NSAID causing this rare complication yet in some other reports H.pylori was demonstrated. Rarely does a malignant ulcer account for these openings (Keskin, 2012). These fistulae usually do not have any symptom on their own and may not require any form of surgical treatment. Some authors have reported cases of spontaneous closures of such fistulous opening, while in some there is a fusion of the accessory opening with the pyloric opening forming a single channel while in others it persist for life (Hu *et al.*, 2001)

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