Management of oesophageal varices by reloaded inexpensive hemorrhoidal O-rings for band ligation at Evangel Hospital, Nigeria

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**Background:** Gastrointestinal endoscopy plays the most important role in diagnosis and treatment of patients with upper gastrointestinal bleeding. Improvements in management of, especially variceal haemorrhage have been reported from Europe and North America. Data on the experience from Nigeria is hereby presented in this report.

**Patients and Methods:** This study was carried out at the Endoscopy Unit of Evangel hospital, Jos between 2004 and 2007. All patients had presented with haematemesis and/or melena. A special reloading kit (produced by McGown; USA) was used to reload previously used and sterilized Opti-vu caps from Saeed six shooter variceal band ligators (North Carolina, USA). Subjects with oesophageal varices underwent banding of the varices down the lower 5cm range of the oesophagus using this innovative technique. These sessions were repeated till the varices were obliterated, lost to follow up or death. Analyses of the data obtained were performed using EPI Info 2004 version 3.3.2 (Atlanta GA, USA).

**Results:** Ninety-two patients were diagnosed to have oesophageal varices during the period of study. Of these, seventy-two (78.2%) underwent initial oesophageal variceal band ligation. Only 40 patients excepting three turned up for repeat gastroscopies. These sessions range from 1–7 with a mean of 2 sessions in order to obliterate the varices. There were two cases of rebleeding following an initial banding. Thirty-one (77.5%) of these patients made satisfactory recovery, 6 did not require a subsequent banding at second gastroscopy, and one patient died before he could have a recheck gastroscopy due to liver failure. Follow up banding sessions (using “O” rings reloaded opti-vu caps) were associated with loss of some of the bands in 12 cases and breaking of the opti-vu cap during unloading in five cases. The records were not detailed enough to capture overall mortality in the study population.

**Conclusion:** Oesophageal variceal band ligation using cheap reloadable haemorrhoidal O rings is a safe and easily acquired skill that can significantly reduce morbidity associated with variceal bleeding in resource-limited settings.

Distinct methylated profiles in *Helicobacter pylori* dependent intestinal type carcinoma and diffuse carcinoma

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**Background and Aim:** *Helicobacter pylori* (Hp) associated gastric cancers are clinically subdivided into two types intestinal and diffuse type. Methylation status of the genes of the CpG islands is known to affect the outcome of infection. Therefore the present study was designed to analyze the methylation profiles of five independent CpG islands namely p15, p16, p73, hMLH1, death associated protein kinase (DAPK) in Hp associated gastric cancers.

**Methods:** Twenty-three gastric cancer patients were recruited in the study. Fresh gastric biopsies were obtained from all the patients from the tumor site as well as the non-affected areas during endoscopy. Hp infection status was assessed by 16s rRNA amplification of the DNA obtained from the non-affected area. Methylation analysis of the p15, p16, p73, hMLH1, and DAPK was performed after bisulphite modification using methylation specific PCR. Histological assessment of the gastric biopsy for the type of cancer was performed as per the updated Sydney system of classification.

**Results:** Hp Histology confirmed intestinal type and diffuse type cancer in 17 (73.9%) subjects 6 (26.1%) subjects respectively. Methylation studies showed 14 (82.3%) intestinal type cancer had three methylated loci and 3 (17.7%) had all the five methylated loci while cases with diffuse pattern of carcinoma had less than two.

**Conclusion:** The distinct methylation patterns of different genes of the CpG islands in *Hp. pylori* associated gastric cancer suggest that both intestinal and diffuse type cancer associated have a different molecular profile as evident.