Novel single balloon enteroscopy for management of small bowel diseases – QEH experience

Hui YT1, Yuen PK1, Fong N2, Kong SH2, Lam WM1, Sze SF1, Lam TW1
1Department of Medicine, QEH 2Combined Endoscopy Unit, QEH

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Introduction
In the era of capsule endoscopy, the number of patients diagnosed to have small bowel diseases is increasing. However, the management of such disease remains difficult and challenging. With the advent of balloon-assisted enteroscopy, minimally invasive endoscopic diagnosis and treatment has now been made possible.

Objectives
To review the performance of this newly introduced procedure in our cluster (KCC).

Methodology
A retrospective review of all the patients who has undergone the novel single balloon enteroscopy (SBE) in QEH.

Result
From May 2008 to June 2012, a total of 8 patients had undergone SBE procedures. Six of them were of male gender and their mean age was 63.1 (± 18.6) years old. The indications of SBE were as follows: clinically overt obscure gastrointestinal bleeding (GIB) (3 patients, 37.5%), occult obscure GIB (2 patients, 25%), protein-losing enteropathy (1 patient, 12.5%), refractory iron deficiency anemia (1 patient, 12.5%), suspected Crohn’s disease with retention of capsule endoscope (1 patient, 12.5%). Capsule endoscopies were performed in 7 patients (87.5%). The median duration of their symptoms prior to SBE procedure was 17.5 months (range 4 to 47 months). Oral route of SBE insertion were carried out in 7 patients (87.5%) under general anesthesia, whereas anal route of insertion was performed in 1 patient (12.5%) under conscious sedation. Air insufflations using CO2 were used in 4 (50%) patients. The median duration of procedure was 114 minutes (range 52 to 202) and the median depth of insertion was 150cm (range 50 to 180) beyond pylorus. New endoscopic findings that were missed by prior capsule endoscopy were noted in 6 patients (85.7%). Definitive diagnoses were made in 6 patients (75%). Three of them (37.5%) were diagnosed to have angiodysplasia and definitive endoscopic therapies using argon plasma coagulation were performed. These 3 patients were all rendered transfusion-independent after the procedure. The other diagnoses made during the procedure included jejunal gastrointestinal stromal tumor, small bowel Crohn’s
disease, bleeding distal jejunal angioma and autoimmune-related small bowel protein-losing enteropathy. No procedure-related complication or mortality was noted. Conclusions Single balloon enteroscopy is a safe and effective endoscopic procedure for patients with suspected small bowel diseases. It allows accurate diagnosis and therapeutic interventions to be made within the same procedure.