



IMAGE

## Hemoclips during motorized spiral enteroscopy—A unique case

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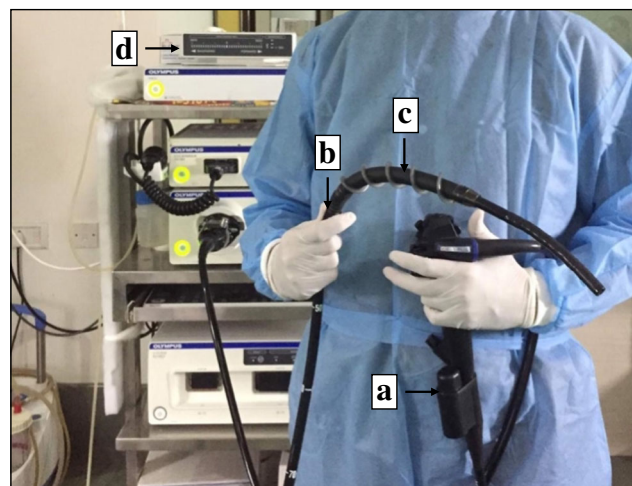
The motorized spiral enteroscopy (MSE) (Olympus Corporation, Japan) is a new technique that allows for quick approach to the deeper small bowel lesions in a controlled manner [1]. Figure 1 shows the assembly of motorized spiral enteroscopy which consists of a reusable endoscope with an integrated motor, a disposable short spiral overtube (Fig. 2a), a spiral rotation force indicator (Fig. 2b), and a motor control unit.

The data from the first prospective clinical feasibility study published recently has demonstrated that MSE can be effectively and safely performed for diagnostic and therapeutic enteroscopy [2]. We present a unique case of obscure gastrointestinal (GI) bleed, which was managed by application of hemoclips through motorized spiral enteroscopy.

A 59-year-old male with no known comorbidities presented with melena for 1 week and postural symptoms for 3 days. Blood investigations revealed a hemoglobin value of 3.5 g/dL and urgent blood transfusion was given. After stabilizing the patient, upper gastrointestinal endoscopy (UGIE) and lower gastrointestinal endoscopy (LGIE) were performed. UGIE was normal and LGIE showed melanic stools with no source of bleeding.

Computed tomography (CT) angiography showed no active GI bleed, after which capsule endoscopy was done. Capsule endoscopy showed active oozing from the jejunum suggestive of a Dieulafoy's lesion.

The patient was then taken for power spiral enteroscopy (ante-grade), which showed active bleeding from proximal jejunal lesion (Fig. 3a). Time required to reach the proximal jejunum was around 7 min and withdrawal time was 3 min approximately. Two through-the-scope hemoclips (Instinct clip, Jaw span - 16 mm, Cook Medical Inc., Bloomington, USA) were applied via the spiral enteroscope and hemostasis was achieved (Fig. 3b).

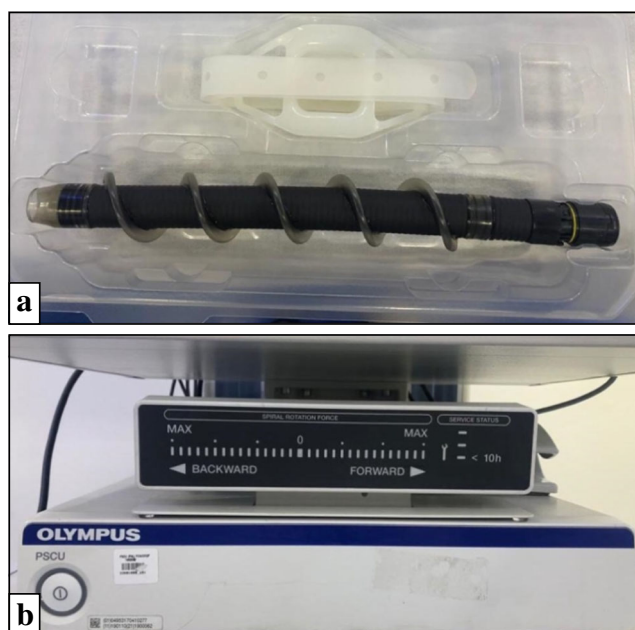


**Fig. 1** Assembly of motorized spiral enteroscopy showing the integrated motor (a), rotation coupler (b), spiral overtube (c), and spiral rotation force indicator (d)

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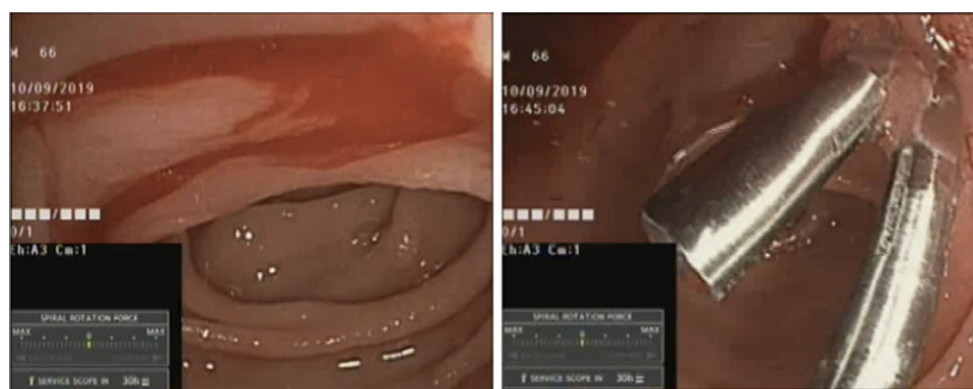
**Fig. 2** (a) Spiral overtube. (b) Spiral rotation force indicator

Patient clinically improved and started passing normal stools after 48 h of the procedure. His repeat hemoglobin at the time of discharge was stable at 10.2 g/dL. The patient maintained a stable hemoglobin with no complaints of melena on follow-up at 3 months.

Double balloon enteroscopy (DBE), single balloon enteroscopy (SBE), and conventional spiral enteroscopy (SE) appear equivalent techniques in the routine clinical

practice [3]. MSE offers additional benefits of reducing procedure time and providing deeper access to the small bowel [2]. Use of Argon plasma coagulation with MSE for angiodysplastic lesions has been reported [4]. MSE has also been used safely for diagnostic colonoscopy with no severe adverse events [5]. However, larger controlled trials are needed to establish the role of this device.

**Fig. 3** (a) Jejunal bleeding point. (b) Hemoclips applied and hemostasis achieved



**a** Jejunal bleeding point

**b** Hemoclips applied and hemostasis achieved

## Compliance with ethical standards

**Conflict of interest** GAR, MR, BBS. SA, DBR, and MKG declare that they have no conflict of interest.

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