

Triple balloon enteroscopy: a combined method

Double-balloon enteroscopy (DBE) has high diagnostic and therapeutic yield (70%–85%) [1], but low completion rates (18%–66%) [2,3]. The NaviAid device (SMART Medical Systems Ltd., Ra'anana, Israel) consists in a through-the-scope (TTS) balloon for deep enteroscopy using a colonoscope [4]. In this case, we combined both types of enteroscopy to achieve deeper insertion.

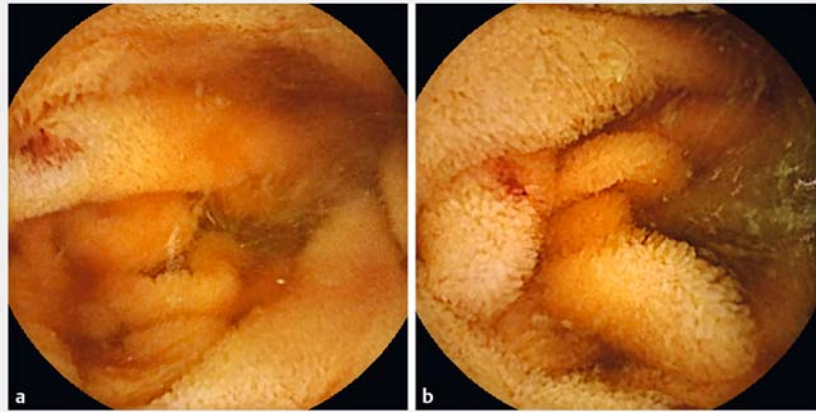
A 52-year-old man was admitted for melena with negative gastroscopy and colonoscopy. Capsule endoscopy showed angioectasia in the jejunum and ileum (► **Fig. 1**).

Before the enteroscopy began, the TTS balloon (NaviAid AB) was introduced through the 3.2-mm working channel of an EN-580T double-balloon enteroscope (Fujinon Inc., Japan). An oral DBE was performed advancing 3.5 m from the ligament of Treitz. After five ineffective progression attempts, the TTS balloon was pushed forward 20–30 cm out of the enteroscope. The TTS balloon was inflated and anchored in the small bowel. The enteroscope balloon was deflated and the enteroscope was pushed as far as the TTS balloon, before the enteroscope balloon was again inflated. The overtube balloon was then deflated and the overtube was pushed to the distal section of the enteroscope. Once the three inflated balloons were together, they were pulled back under fluoroscopic guidance. The same steps were performed repeatedly, achieving a further advance of 1.5 m (► **Video 1**). During the retrieval, angioectasias were treated with argon plasma coagulation.

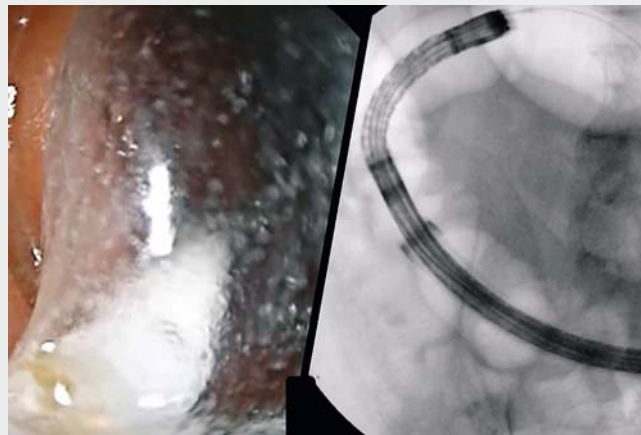
Endoscopy_UCTN_Code_TTT_1AP

Competing interests

None



► **Fig. 1** Capsule endoscopy images showing angioectasias in the small bowel.



► **Video 1** Schematic showing the technique of triple-balloon enteroscopy, along with views during the procedure which allowed for improved advancement of the enteroscope through the small bowel.



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