

JGH

EDUCATION AND IMAGING

Gastroenterology: Video capsule endoscopy disclosure of unprecedented therapeutic effect of Eviendep on small bowel polyposis in Lynch syndrome

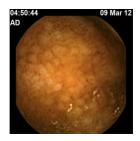


Figure 1 VCE picture before Eviendep treatment. After therapy, 5-hour recording time showed that many polyps had almost disappeared.

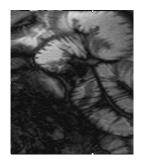


Figure 2 RME before Eviendep therapy: a significant number of polyps is observed, shown by the absence of contrast medium.

Lynch syndrome (LS) is an autosomal dominant condition featuring defects in mismatch repair genes (MLH1, MSH2, PMS2 and MSH6). LS accounts for 2-5 % of colorectal cancers (CRC), characterized by early onset, predominantly right-sided, synchronous and metachronous, and extracolonic malignancies. In LS patients the small-bowel carcinoma risk is >100-fold that of the general population, affecting the entire small bowel (proximal: 43%, jejunum: 33%, ileum: 7%); prognosis is poor.

Epidemiological and experimental studies demonstrate a protective role of estrogens against CRC, mediated by binding to beta receptors (ER- β). A mixture of phytoestrogens and insoluble fibers (Eviendep®, CMD Pharma Limited, London, UK) selectively increased ER- β expression. In adenomatous polyposis mouse models (ApcMin/+), Eviendep® reduced polyp size, number, and dysplasia. In Familial Adenomatous Polyposis with recurrent duodenal adenomas, 90-day supplementation with Eviendep® markedly reduced polyp number and size.

We report the case of a 55-year-old man, who underwent right hemicolectomy for CRC when he was 28. After 24 years, a subtotal colectomy and 15 cm-ileum resection were performed for carcinoma recurrence; a mutation in gene hMSH1 was detected (LS diagnosis). Video capsule endoscopy (VCE) (PillCam SB2 CE system, Given Imaging Ltd., Israel) demonstrated few small gastric polyps and multiple polyps covering the intestinal mucosa (Fig. 1). Sigmoidoscopy showed a normal ileocolic anastomosis.

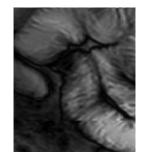


Figure 3 RME after 3 months Eviendep therapy: an evident reduction of the number and size of polyps is observed, shown by the absence of contrast medium.

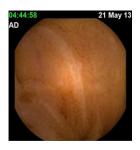


Figure 4 VCE pictures after 9 months Eviendep treatment; many polyps have practically disappeared.

Magnetic Resonance enteroclysis (MRE) confirmed VCE findings: multiple intraluminal sessile and pedunculated protrusions at the jejunum and ileum (size: 5–15 mm) (Fig. 2).

After giving informed consent, the patient started dietary supplementation with Eviendep® (2 sachets/day/3 months). Subsequently, MRE showed a significant reduction of polyp number and size (Fig. 3). Therefore, Eviendep® was continued for a further 6 months, and VCE showed a further reduction in number and size of small bowel polyps. After 9 months VCE showed no abnormality in the esophagus and stomach. A small polyp (0.2 cm) in the duodenal bulb and two small polyps (0.1 cm) in the jejunum were detected; rare polyps (about 5) measuring 0.1 cm were seen in the proximal ileum and a few (5–6), mean size 0.2, in the distal ileum (Fig. 4).

Our report confirms the promise of Eviendep® as a chemopreventive agent for intestinal polyps.

Contributed by

R Bringiotti,* E Ierardi,* N De Tullio,* MR Fracella,[†] D Brindicci,[†] R Marmo,[‡] F Albano,* S Papagni,* A Di Leo* and M Principi* *Department of Emergency and Organ Transplantation, University of Bari (Italy), [†]Radiology Unit, S. Paolo Hospital, Bari, and ^{*}Division of Gastroenterology,

Hospital Curto, Polla, Italy