Chemoprevention of polyp recurrence with curcumin followed by silibinin in a case of multiple colorectal adenomas

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Dear Editor,

We present the case of a 57-year-old man without mutations in the APC or MYH genes and with blood in the stool. There was no family history of colonic polyposis. Fifty-four polyps were found in the first colonoscopy (February, 2013), most of them were 3 to 8 mm in size. These were treated by polypectomy and one lesion was 20 mm in size with high grade dysplasia/adenocarcinoma. Four subsequent colonoscopies showed continuous development of adenomatous polyps of 3 to 6 mm in size. These were mainly treated by polypectomy and some were heat-treated (July 2013: 43 polyps; February 2014: 23; November 2014: 15; November 2015: 40).

The patient began treatment with one 400 mg capsule of curcumin a day (Green Sun) for three and a half months. Curcumin was discontinued as cholelithiasis occurred and this product is cholecystokinetic. He was subsequently treated with two tablets a day of silibinin (Eurosil 85®) (Legasil®) for three months. The dose was reduced by alternating between one and two tablets a day for six months due to mild headaches. Each tablet contains 126 mg of silibinin and 18 mg of vitamin E. After treatment, less polyps were found than in the previous colonoscopies. Three polyps of 2, 3 and 8 mm in size were found by colonoscopy in January 2017.

Discussion

Curcumin decreases intestinal polyp development in APC\textsuperscript{Min/+} mice, enhances apoptosis, increases DNA repair (1) and has anti-inflammatory activity. In combination with quercetin, it appeared to be effective in reducing polyps in the rectum and ileoanal pouch in five patients with familial adenomatous polyposis treated by colectomy (2).

Silibinin is the major active constituent of silymarin. It decreases polyp formation in APC\textsuperscript{Min/+} mice, inhibits cell proliferation, inflammation and angiogenesis, induces apoptosis, decreases beta-catenin levels (3), and targets colorectal cancer stem cells (4). Curcumin sensitizes silymarin to exert a synergistic anticancer activity on colon cancer cells (5).

This is to our knowledge, the first case showing that curcumin followed by silibinin decreases colon polyp formation.

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References