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Reduction of the frequency of recurrent diverticulitis episodes under treatment with the integrative medicine therapies *Carpellum Mali comp*. and *Kalium aceticum comp*.—A case report

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ABSTRACT

Background: Colonic diverticula develop in at least 60% of elderly patients. Less than 25% of these develop diverticulitis. Recurrent episodes are experienced by about 13% of the symptomatic patients. The effect on prevention of recurrent diverticulitis of currently used therapies is controversial. Surgical colon resection is used in some patients in emergency or to prevent future episodes and complications.

Carpellum Mali comp. (Juglans regia, Testa; Pirus malus, Carpellum) and *Kalium aceticum comp.* (Kalium carbonicum, Acetum vini destillatum, Antimonit, Crocus sativus, Spiritus e vino, Corallium rubrum) – preparations of Integrative Anthroposophic Medicine – have been used for at least 60 years to improve chronic abdominal pain and to treat obstipation, irritable bowel syndrome and colitis.

Case presentation: A 72-year-old retired physician presented in 2013 with a 7-year history of recurrent diverticulitis. During the first 6 years, three to four episodes each year required antibiotic therapy. In 2013 the episodes became more frequent, occurring approximately every 2 months. The patient was concerned about risks from repeated antibiotic treatment and the potential need for surgery. Oral *Carpellum Mali comp.* and subcutaneous *Kalium aceticum comp.* treatments were added to the therapy in March. The patient experienced improvement over 4 months without any symptoms. In the following 28 months she had 4 minor diverticulitis episodes, followed by 11-months without any flares; she reported no side effects in the 41-month follow-up period.

Conclusion: Carpellum Mali comp. and *Kalium aceticum comp.* seem to have been helpful in the case presented here. Experiences with theses remedies in recurrent diverticulitis should be collected to determine whether it would be meaningful to carry out further investigations.

1. Introduction

Diverticular disease is a common condition and contributes significantly to health care costs in industrialized countries.[1] The incidence of diverticula increases with age, approaching 60% in 80-year-olds. Most patients with diverticula are asymptomatic, but an estimated 10–25% of these patients have diverticular disease, consisting of abdominal pain, bloating, cramping and tenderness. A smaller number of these symptomatic patients also develop diverticulitis, characterized by prolonged abdominal pain and fever. Development of diverticular disease is not well understood, but red meat consumption, alcohol intake and medications like non-steroidal analgesics and corticosteroids were found to be risk factors.[2,3] After an initial episode of diverticulits, 13–16% of patients may develop recurrent diverticulits. Risk factors for recurrence include the length of the involved colon, male gender, multiple comorbidities, and previous recurrences.[4,5] Inflammation is known to occur as a consequence of diverticulitis, and it may actually be an initiating factor for flares.[6] Patients with high C-reactive protein levels are three times as likely to experience recurrence of diverticulitis.[5] Recurrent diverticulitis and inflammatory bowel disease (IBD) are associated with bowel inflammation, therefore, medications used for IBD continue to be studied for recurrent diverticulitis. So far, clinical trials consisting of antibiotics, steroids, probiotics and fiber agents have not conclusively shown effectiveness in prolonging remissions or preventing recurrent diverticulitis.[2,7,8] Rifaximin, a non-absorbable antibiotic, has shown improved diverticular symptoms compared to fiber

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supplementation alone.[7] Mesalamine, a topical steroid instilled in the colon, may prolong remissions when paired with rifaximin,[2] but 4 placebo-controlled studies found no evidence that mesalamine helps prevent recurrent diverticulitis.[9] In a 12-week study of rifaximin for irritable bowel symptoms, Pimentel et al. found 1–7% incidence of abdominal pain, nausea, vomiting or diarrhea and 6–7% incidence of headache associated with taking the antibiotic.[10] A pooled analysis of multiple rifaximin trials concluded a 10.9% overall incidence of gastrointestinal side effects using rifaximin.[11] Results of a multicenter study of mesalamine recorded overall 15–19% incidence of treatment-associated gastrointestinal disorders (nausea, abdominal pain, diarrhea, possible exacerbation of colitis) and 17% incidence of headache.[12] High fiber diets appear to lessen symptoms of diverticular disease, but don't prolong remissions or prevent recurrent diverticulitis according to a recent review.[8] Probiotics may change the colon microbiome, potentially enhancing colon defense against invasive bacteria and reducing bowel inflammation. Lahner, Bellisario, Hassan et al. reviewed 11 studies of probiotic treatment for diverticular disease. The authors reported that probiotics appeared to show a positive trend in reducing diverticular symptoms, but that the studies were too heterogeneous to draw conclusions about probiotic effectiveness.[13]

Carpellum Mali comp and *Kalium aceticum comp.* have been used since the 1920′s to improve chronic abdominal pain, and resolve obstipation, irritable bowel and colitis symptoms by physicians familiar with Integrative Anthroposophic Medicine (IAM), an integrative medical system.[14–16] Car*pellum Mali comp.* consists of walnut and crab apple. *Kalium aceticum comp.* contains crocus stigma, stibnite, and red coral. About 900 prescriptions for these remedies are filled yearly worldwide (about 65 in the US). Over the past 15 years, the pharmacovigilant database of the manufacturer Weleda AG tracked a single report of nausea and vomiting for *Kalium aceticum comp.,* with no side effects recorded for *Carpellum Mali comp*. (*for more details of the preparations see* Table 1).

2. Case report

A 72-year-old retired physician presented in September 2013 with a history of recurrent bouts of diverticulitis. The episodes usually started with left lower quadrant pain and sometimes with fever. The patient experienced her first bout in 2006, after her husband's death, followed by another 2 bouts within the same year. From 2006–2012 she had 3–4 bouts per year requiring antibiotic treatment. An abdominal CT scan showed multitudes of diverticula in the sigmoid colon, and scattered diverticula in the transverse and descending the colon (Fig. 1). A colonoscopy in 2007 described the sigmoid colon as "stiff", suggesting scarring, and her internist had suggested that colon resection may be necessary in the future. Then in 2013, diverticulitis bouts increased in frequency to every two months. In August 2013, a colorectal surgeon suggested a "white diet" (mashed potatoes, yogurt, and rice). She followed this diet for a month, then gradually increased her diet to include foods she tolerated. In this process, cruciferous vegetables including cabbage, broccoli and cauliflower consistently caused abdominal pain and were eliminated. However, frequent diverticulitis flares persisted. Another abdominal CT was done in July 2013 and showed an acute diverticulitis, involving the distal transverse colon and descending colon with associated colonic wall thickening and diffuse perimesenteric inflammatory changes.

Her past medical history includes hypertension, coronary artery disease, with 4-vessal coronary artery bypass graft surgery (age 57), gastroesophageal reflux disease longstanding but much worse since CABPG, lumpectomy with sentinel node biopsy for breast cancer 2008, and 6 resections of basal cell carcinomas from her arms, legs and back in her late fifties and early sixties.

Medications included lisinopril 5 mg daily, omeprazole 40 mg daily, atorvastatin 20 mg daily, Vitamin D 1000 units daily, gabapentin 100 mg daily, acetylsalicylic acid 325 mg daily, a probiotic containing multiple flora including *lactobacillus,* the laxative miralax *(polypropoline glycol)* and a multivitamin.

On presentation she was a thin, articulate woman with reserved, measured responses. Her vital signs and physical exam were normal except for a sternal surgical scar from coronary artery bypass surgery.

Three remedies were prescribed: 1) Stibium ointment 0.4% for external use at the abdominal wall three times daily for colitis symptoms; 2) Digestodoron® dosed 20 drops 3x a day in a tablespoon of water for disturbances of secretion and motility in the intestinal tract; 3) *Conchae argentum* to help promote intestinal mucosal healing after her multiple flares and courses of antibiotics. In the following month, another diverticular inflammation had occurred. The patient was contemplating bowel resection, but decided to give the remedies more time. Five months later, in March 2014, she reported 3 more diverticulitis flares for a total of 5 episodes in the past 12 months. The remedies didn't appear to have helped, and she was concerned about her future. At this point, *Carpellum Mali comp.,* 10 drops taken orally 3 times a day and *Kalium aceticum comp.* ampules 1cc as subcutaneous injection twice a week were added to her 3 previous remedy prescriptions. During 4 months of taking *Carpellum Mali comp.* and *Kalium aceticum comp.*, the patient reported vast improvement, with no abdominal pain at all and no episodes requiring antibiotics. After that, she started injecting *Kalium aceticum comp.* less consistently. In October 2015, she reported 3 diverticulitis flares requiring antibiotic treatment, over the past 18 months. A pattern of approximately 2 annual diverticular flares continued for another year. In response to a flare of diverticulitis in September 2016, she resumed regular use of *Kalium aceticum comp*. Starting in September 2016, she experienced no further diverticulitis episodes in the following 11 months. She continued to take *Carpellum Mali comp.* as well as Digestodoron, Conchae argentum and Stibium ointment. She reported no side effects from taking any remedy (for course of disease, see Fig. 1).

3. Patient's perspective

"The onset of diverticulitis and its frequent recurrences were

Table 1
IAM remedies used in this patient.

Preparation	Manufacturer	Ingredients
Carpellum Mali comp.	Weleda	Juglans regia, Testa D4 (dilution 1:10^4); Pirus malus, Carpellum D4 (dilution 1:10^4)
Kalium aceticum comp. D6 (dilution 1:10^6)	Weleda/Uriel pharmcy	1 g Kalium aceticum comp. original substance is produced from: 0.48 g Kalium carbonicum, 5.7 g Acetum vini destilla-tum, 0.02 g Antimonit, 2.1 g Crocus sativus tincture, 6.7 g Spiritus e vino, 0.29 g Corallium rubrum.
Stibium 0.4% ointment	Uriel pharmacy	100 gm contains: 4 g Stibium (Antimony) D1 (dilution 1:10), White petrolatum, Mineral oil
Digestodoron®	Weleda	10 g (=9.4 ml) original substance contains: 1,8 g ethanol. Digestio (1:3.1) from Dryopteris filix-mas, Folium rec./0.4 g ethanol. Digestio (1:3.1) from Polypodium vulgare, Folium rec./4 g ethanol. Digestio (1:3.1) from Salix alba/purpurea/viminalis, Folium rec./1.8 g ethanol. Digestio (1:3.1) from Phyllitis scolopendrium, Folium rec
Conchae Argentum	Uriel pharmacy	Filix mas (Male fern) D3 (dilution 1:10^3), Pteridium aquilinum (Eagle fern) D3 (dilution 1:10^3), Scolopendrium (Hart's tongue) D3 (dilution 1:10^3), Argentum met. (Silver) D6 (dilution 1:10^6), Conchae (Oyster shells) D6 (dilution 1:10^6), Agaricus (Fly agaric mushroom) D7 (dilution 1:10^7), Organic sucrose, Lactose