

## REVIEW ARTICLE

# Coffee Enemas: A Narrative Review

Linda L. Isaacs, MD

### ABSTRACT

Coffee enemas have been in use for at least 150 years, despite the efforts over the last several decades by some in the orthodox medical community to stamp them out as “quackery.” The author and her patients, and other practitioners, find them very useful for the alleviation of a

variety of symptoms. In this review, the history of their use, possible mechanisms of action, and risks are discussed, as well as the validity of the attacks against them. (*Altern Ther Health Med.* 2021;27(3):46-49).

Linda L. Isaacs, MD, is in private practice in Austin, TX.

Corresponding author: Linda L. Isaacs, MD

E-mail: [lindaaisacsmd@hushmail.com](mailto:lindaaisacsmd@hushmail.com)

### INTRODUCTION

Along with my colleague, the late Dr. Nicholas J. Gonzalez, I have recommended coffee enemas to patients for decades. Patients are always nervous about them, but most are startled to find that they love them. They report relief from symptoms such as headaches, myalgias, arthralgias, fatigue, malaise, “brain fog,” and, of course, constipation.

Two 2019 journal articles discussed coffee enemas; one, published in *Advances in Mind-Body Medicine*, described them as beneficial.<sup>1</sup> Another, in *Lancet Oncology*, vehemently dismissed them.<sup>2</sup> As an advocate, here I will review the subject in more depth in the hopes of encouraging more practitioners to try them, and more research to be done on them.

### History

Two practitioners in the alternative cancer treatment world are known for the use of coffee enemas; Dr. Max Gerson and Dr. William Donald Kelley.<sup>3,4</sup> But neither of them invented coffee enemas.

In an article published in 1861, a patient with atropine poisoning was successfully treated with, among other things, coffee enemas.<sup>5</sup> Other physicians in the 1800s reported on the use of coffee enemas for poisonings.<sup>6,7</sup> One author reminisced in 1875 about coffee enemas being administered by the “usual means” in 1858-59, suggesting that they had been in use for some time before that.<sup>8</sup>

In an 1897 article in *The Sanitary Record*, a terminally ill patient with “sarcomatous growths” was liberally dosed with brandy by her family before they called the doctor.<sup>9</sup> He believed she was unresponsive from too much alcohol, and he had found coffee enemas valuable in the postoperative period to counter the effects of anesthesia. He administered a coffee enema and within 15 minutes the patient became responsive, and she lived for an additional 3 weeks. Other surgeons found postoperative coffee enemas useful in cases of shock,<sup>10,11</sup> including Dr. WJ Mayo, who stated in an 1896 lecture that he used them after surgical treatment of pyloric obstruction.<sup>12</sup>

Supposedly, coffee enemas were used for pain management when opioids were unavailable for injured soldiers in World War I, and in the Crimean War by Florence Nightingale.<sup>13,14</sup> Unfortunately, the authors that provided these anecdotes did not supply contemporaneous documentation.

In 1941, the Uruguayan surgeon Dr. Carlos Stajano reported on his experience with coffee enemas starting in 1916.<sup>15</sup> He found them to be effective in cases of poisoning and in postoperative shock and pleaded for wider usage and research. He believed the mechanism of action was unrelated to caffeine, since other practitioners had tried purified caffeine and found it ineffective.

Coffee enemas were included in nursing textbooks through the mid-20th century, and in the *Merck Manual* through the 11th edition, published in 1966.<sup>16,17</sup>

### MECHANISM OF ACTION

Both Gerson and Kelley believed that coffee enemas rid the body of metabolic wastes by increasing the flow of bile

from the liver and gallbladder.<sup>3,4</sup> In 1929, Garbat and Jacobi established that secretion of bile into the duodenum occurred with rectal infusion of various liquids, though they did not use coffee.<sup>18</sup> A 1990 study showed that oral ingestion of caffeinated coffee, and to a lesser extent decaffeinated coffee, increased plasma cholecystokinin levels and gallbladder contraction.<sup>19</sup> A 2014 publication confirmed stimulation of bile flow by coffee enemas by investigators who used coffee enemas as a way to clear bile prior to capsule endoscopy.<sup>20</sup>

In a 2001 article about the Gerson Therapy, Dr. Morton Walker speculated that coffee enemas stimulate the enzyme glutathione *S*-transferase, thereby increasing the amount of available glutathione for the body to use in waste removal.<sup>21</sup> He based this on the work of investigators who described a substantial increase in glutathione *S*-transferase activity in the liver and small intestine when experimental animals were fed a diet 20% of which was green coffee beans.<sup>22</sup> Subsequently, his article has been quoted by others to say that coffee enemas increase glutathione *S*-transferase by 700%.

Drinking coffee can raise plasma glutathione levels.<sup>23</sup> But to believe that a coffee decoction taken rectally in humans can have the same effect as enormous amounts of ingested coffee beans in animals requires a leap of faith since the concentration of the active ingredients would be considerably less. In a study by Teekachunhatean et al, equal amounts of coffee were taken orally or rectally. Absorption of caffeine was considerably more efficient by the oral route, though slightly faster by the rectal route.<sup>24</sup> Presumably this would be true of the absorption of other compounds in coffee as well.

Teekachunhatean et al also studied glutathione levels in healthy subjects who either drank coffee or used coffee enemas.<sup>25</sup> They found that neither method of coffee administration increased glutathione concentrations in a statistically significant way, but they did discuss a “trend to enhancement” in both the oral and rectal route. Their dosage of coffee and frequency of administration were quite low compared to what is required by either the Gerson or Kelley treatments. It is possible that coffee enemas would raise glutathione levels if done at a higher dose, but this has not been proven.

The health care practitioners discussed earlier who used coffee enemas for poisonings and postoperative care simply stated that coffee enemas were beneficial; they did not attempt to explain why. None of the practitioners discussed the concept of “autointoxication” that became popular in the late-19th and early-20th centuries. In this schema, much illness, especially mental illness, was caused by disturbances in the gut due to structural problems and constipation; this led to a wide variety of treatments, from colonic irrigation to surgery. The rise, fall, and tentative reincarnation of this concept is well detailed in articles by Bested et al in the journal *Gut Pathogens*.<sup>26-28</sup>

Recent negative articles about coffee enemas have conflated their evaluation with that of “autointoxication.” This is true in the 2019 *Lancet Oncology* article that states “the diagnosis of autointoxication was discarded by the

medical community almost 100 years ago when advances in science did not support this hypothesis.”<sup>22</sup> But in Bested et al’s review of the relevant articles of the era, the data from 100 years ago was not good quality.<sup>26</sup> Autointoxication was a fad that ran its course, but the medical community turned its back on the concept because of “expert” opinion and a campaign against quackery, not because of sound data.<sup>29</sup> This shift in thinking made exploration of the role of diet and gut health in neurology and mental illness a no-man’s-land of scientific inquiry for many years. It is only recently, as the role of the microbiome becomes increasingly apparent, that it has again become acceptable in the academic world to explore this connection.

## RISKS

A 1980 article by Eisele and Reay described 2 patients whose deaths were attributed to electrolyte disturbances caused by coffee enemas.<sup>30</sup> The first case involved a woman who had severe right upper quadrant pain and vomiting. She refused hospitalization, instead taking a coffee enema once per hour. She then had a grand mal seizure, and on arrival at the emergency room had a sodium level of 113 mEq/L. Vomiting in and of itself can cause hyponatremia, and no prudent practitioner would have treated the patient in this manner.

The second patient had metastatic breast cancer and, after briefly trying chemotherapy, began a protocol that included coffee enemas. She was feeble for 2 weeks before death and vomiting the night before. On autopsy, she was noted to have metastases in the tumor bed, the liver, and mediastinal, hilar, and paratracheal nodes. She also had bilateral pleural effusions, pericardial effusions, and ascites. Despite all this, the authors believed that her cancer was not extensive enough to cause death; they conceded that malignant pericardial effusions can be fatal, but did not report on the pathology of the fluid. Analysis of vitreous humor electrolytes showed low sodium and potassium, and based on that, the blame for death was placed on coffee enemas. The authors ended by saying that they expected to hear of many similar cases going forward. However, in a search of PubMed, no other articles describing this complication were found. Teekachunhatean et al monitored electrolytes as well as glutathione levels in patients receiving coffee enemas, and found that the enemas had no effect.<sup>25</sup>

Another purported risk of coffee enemas is septicemia. The patient in one case report had hepatic failure and ascites, which makes patients prone to infection whether or not they are performing coffee enemas.<sup>31</sup> Another article describes a patient with newly diagnosed diabetes type 1 experiencing ketoacidosis and an unusual, disseminated infection, *Clostridium septicum*.<sup>32</sup> The patient had been sick for a week before seeking medical attention, and had been using coffee enemas for constipation. She underwent exploratory laparotomy with right hemicolectomy for “what appeared to be ischemic right colon with perforation of the cecum.” *Clostridium septicum*, according to the article, colonizes the

terminal ileum and cecum, and if the gut mucosa is disrupted it allows hematogenous spread, especially with immunocompromise from conditions such as diabetes. Therefore, the patient's ischemic colon, cecal perforation, and diabetes would explain both the infection and its dissemination. Coffee enemas were brought up as a theoretical concern by the authors, however as they are a low-pressure, low-volume intervention that should affect only the rectum and perhaps the descending colon, it is hard to see how the enemas could have caused either the cecal perforation or the dissemination of the infection.

Articles have also been written about patients who suffered rectal burns.<sup>33,34</sup> This complication can easily be prevented by the application of some common sense and the use of a thermometer.

A 2020 article on self-administered coffee enemas reviewed case reports in the medical literature; the 9 case reports that met their criteria described risks such as burns, infections, and colitis.<sup>35</sup> But case reports simply describe an outcome, not how common that outcome is. In 30 years of recommending multiple daily coffee enemas to hundreds of patients, Gonzalez and I have never had a patient with these complications. I do believe that they should be used with caution or avoided in patients with fluid overload, inflammatory bowel disease or any other disease of the colon, or immunosuppression.

## DISCUSSION

If the benefits and mechanism of action of coffee enemas are so poorly defined, why do I use them in my practice? Gonzalez and I set out to recreate the methods and practice of Kelley, the unorthodox cancer practitioner, and he recommended multiple daily coffee enemas very strongly.<sup>36</sup> If Kelley believed they were of critical importance, it would not have made sense to leave them out. We found them to be of critical importance as well; all of the patients in our published case reports used them.<sup>37,38</sup>

I myself have found them extremely beneficial. In my last year of medical school I developed a fatigue syndrome that became severe during my internship. I tried coffee enemas and felt so much better with them that I was willing to get up 45 minutes early to do them, even at times when I was desperate for more sleep.

Coffee enemas can relieve constipation, but that is not their only benefit. They can be helpful for fatigue and malaise, headaches, arthralgias and myalgias, and difficulty concentrating. Patients typically report an improved sense of well-being after doing them. When circumstances prevent them from doing the enemas, they try drinking coffee instead, but they report the effect is not the same. I found that to be true as well when I worked overnight and through the next afternoon during my medical residency.

Critics of coffee enemas would say that they are still around because of the "triumph of ignorance over science," and that practitioners like myself have incredible persuasive powers that create a robust, durable placebo effect.<sup>39</sup> I find it

hard to believe that the placebo effect can account for the improvement patients report when the patients don't believe that the enemas will help until they try them, and when the procedure is time-consuming and potentially messy. As for our persuasive abilities, Gonzalez and I both have heard from patients we had not seen for years who had stopped all other aspects of the programs we had given them, but who contacted our office to ask where they could purchase the enema equipment since theirs had finally worn out. Is it not possible that coffee enemas have survived the anti-quackery efforts of the medical community not because of the hypnotic skills of their advocates, but simply because they make people feel better?

Does it disturb me that the mechanism of action is not clear? It might, had I not trained in an era where that was not unusual. During my internship I routinely administered nitroglycerin sublingually, topically and intravenously, though the molecular mechanisms were not known at the time.<sup>40</sup>

Should researchers truly wish to investigate the value of coffee enemas, I suggest that they first see whether they do indeed help people feel better, instead of trying to shoot down the theories of those who use them. Nitroglycerin, foxglove, and willow bark were all valued by clinicians well before a mechanism of action was established. Coffee enemas have also been valued by generations of clinicians, but they were discarded without a fair trial, based only on cries of "quackery."<sup>29</sup> I hope that will change in my lifetime. In the meantime, I am happy to provide instructions and tips to any practitioner who contacts me.

## FUNDING

none

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