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Revisiting the Pepto Treatment for Microscopic Colitis



The first recommended treatment for microscopic colitis (MC) was the Pepto treatment, back in the late 1990's. In 1998, Dr. Kenneth Fine's trial using Pepto Bismol to treat a dozen MC patients was published in the medical journal *Gastroenterology*. The regimen required that each patient take 8 bismuth subsalicylate tablets per day for 8 weeks. The results were impressive when compared with most treatments with medications in general. At the end of the study, 92 % of the subjects experienced improvement, and 75 % reached remission. The average response time was two weeks. Furthermore, the subjects were followed for 7-28 months, and those who had achieved remission continued to remain in remission without further treatment. There is no other known treatment for MC that will give that level of lasting remission without further treatment.

But Dr. Fine no longer recommends the Pepto treatment as a first line treatment for MC, basically for two reasons:

1. Some patients develop tinnitus or neurological issues from using the treatment.
2. The treatment must be done in conjunction with the GF diet, and although remission takes longer without the Pepto Bismol, most MC patients can achieve remission by using the GF diet alone.

Some gastroenterologists still recommend the Pepto treatment today, but they almost always fail to point out that the treatment must be done in conjunction with the GF diet. Consequently, after the treatment ends, their patients usually relapse.

Experience shows that the Pepto treatment is still useful (when used along with the GF diet) for decreasing the amount of time required to reach remission. If you decide to try it, expect a black tongue and black stool during the treatment. The color of your tongue and your stool will return to normal when the treatment is ended. That said, there are now two new formulations of Pepto Bismol available that can at least help users to avoid the black tongue from the original chewable tablet — one is a caplet, and the other is a liquid jell capsule. They are swallowed whole, instead of chewed.

Pepto Bismol has mild antibiotic properties.

It also coats the lining of the digestive tract to sooth it and protect it from irritants that might be in the fecal stream. Therefore, it works best when the daily dose is divided up into several roughly equal intervals during the day. 3 tablets (or the liquid equivalent) in the morning, 2 at noon, and 3 in the

evening seems to work well, for example.

In many situations, flares can be very difficult to resolve.

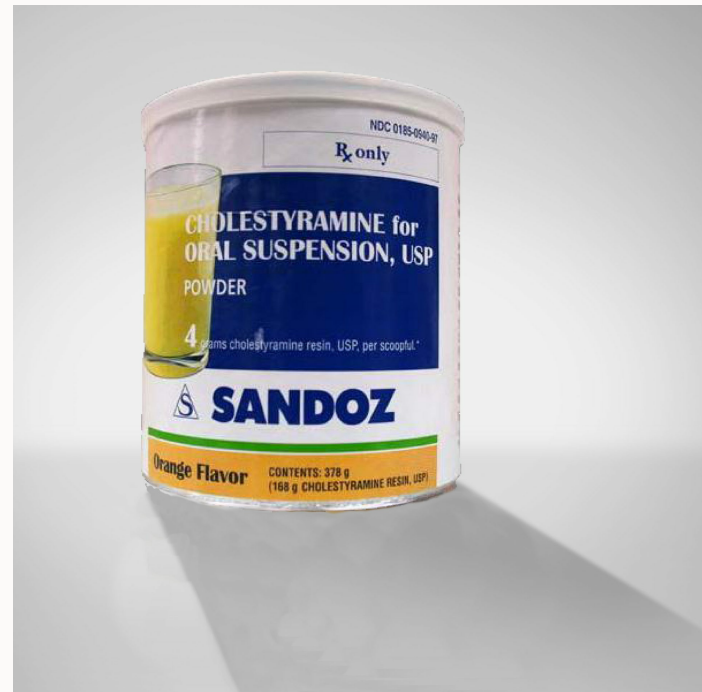
The Pepto treatment might provide a way for someone who is experiencing a flare to get back to remission faster, without having to resort to a corticosteroid. Compared with most medical treatment alternatives, it's a relatively safe treatment, and it's basically just as effective as most medical treatment alternatives.

Reference:

Fine, K. D., Lee, E. L. (1998). Efficacy of open-label bismuth subsalicylate for the treatment of microscopic colitis. *Gastroenterology*. 114(1), 29-36. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/9428215>

Using Cholestyramine to Treat Microscopic Colitis

When nothing else seems to work to control MC, a Cholestyramine treatment is usually worth trying due to the possibility that Bile Acid Diarrhea (BAD) may be the primary problem. This has been proven to be useful for patients who don't respond to budesonide or who don't want to take budesonide. BAD has been shown to



be responsible for diarrhea in up to 40 % of MC patients, at least a third of IBS patients, and even about 1 % of the general population. **(1)**

Normally, about 90 % of the bile released into the small intestine for digesting fats is unused. So it's usually recycled (reabsorbed) in the terminal ileum.

When reabsorption is compromised, the bile passes on into the colon, where it often causes diarrhea. Consequently, a treatment that either enhances the reabsorption of bile, or sequesters the bile before it reaches the colon can prevent diarrhea caused by BAD.

Research shows that bile uptake is regulated by cortisol, so Budesonide helps by enhancing the reabsorption of bile, because budesonide is a source of cortisol.**(2)** Or, bile can be sequestered by using cholestyramine, then it will pass harmlessly out of the body. Note that when Budesonide is used, fats can still be absorbed, (because budesonide enhances bile absorption). With cholestyramine, those fats are lost because they cannot be absorbed without the bile. Naturally, researchers are trying to prove that various new expensive drugs can be used for this purpose, but plain old cholestyramine seems to work well when the proper dosage is used, and cholestyramine is an old drug, so it's inexpensive.

Not all brands are effective for many people, especially the Lite versions. Most MC patients who have tried it have found that the Sandoz brand seems to work the best. A good choice for most MC patients seems to be to start with two packets per day, and adjust the dosage either up or down as needed from there. Often it will work better when the dose is divided up between two doses per day.

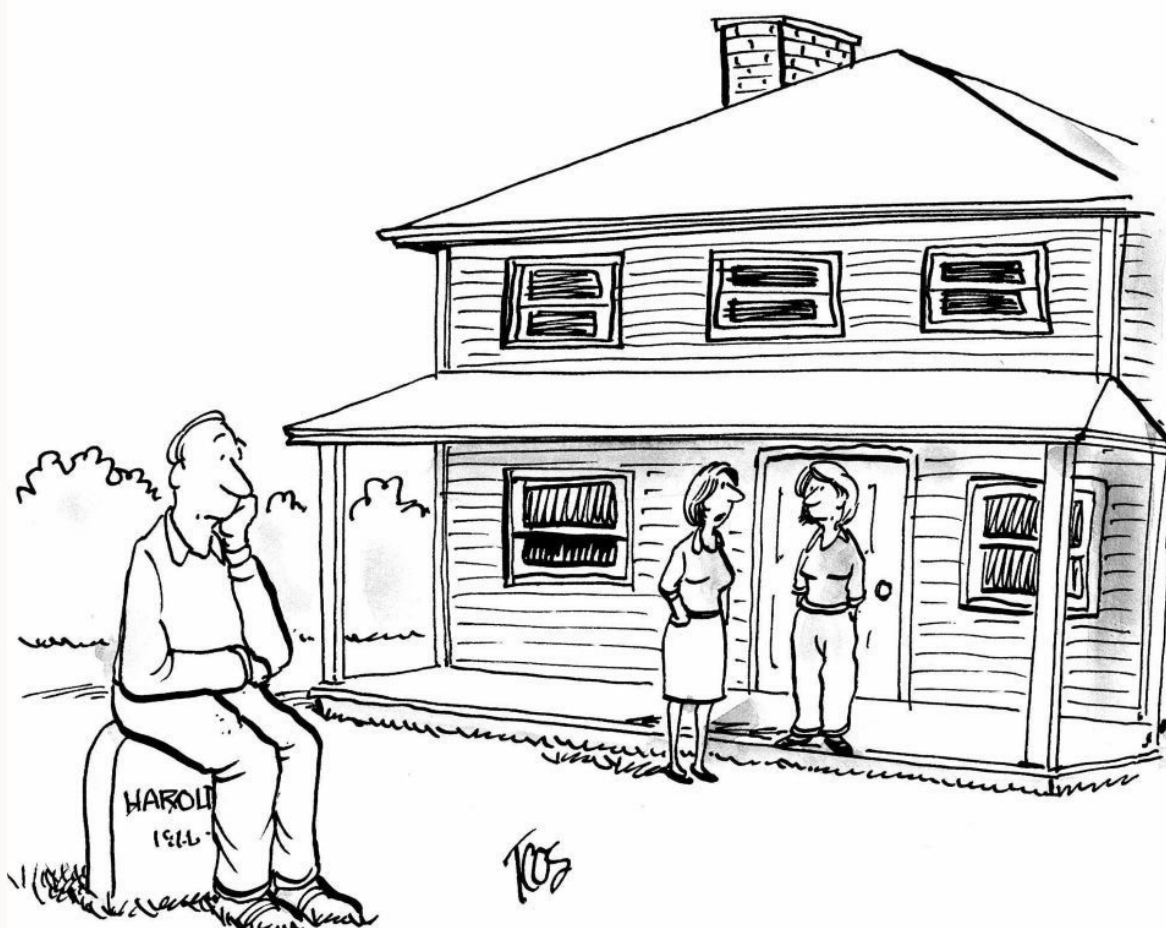
Cholestyramine should be taken before a meal and/or at bedtime, and any

other medications should be taken at least 2 hours before or four hours after taking cholestyramine. This is because it will also sequester most medications (and supplements), and prevent them from being absorbed properly. Despite the dose timing restrictions, cholestyramine is a relatively safe medication that works well for many MC patients who find themselves unable to achieve remission after trying most other treatments.

References:

1. Imperial College London. (2014, October 20). New class of drugs shows promise in treating chronic diarrhea. Retrieved from <https://medicalxpress.com/news/2014-10-class-drugs-chronic-diarrhea.html>
2. Helmholtz Association of German Research Centres. (2011, July 7). Cortisol controls recycling of bile acids. Retrieved from <https://www.sciencedaily.com/releases/2011/07/110707102001.htm>

Is Microscopic Colitis Associated with an Increased Mortality Risk?



"Henry was really counting on dying."

On August 16, 2019, the Gastroenterology & Endoscopy News published a story with the headline *"Microscopic Colitis Linked to Increased Mortality"*. **(1)** In that article, they discussed a research project that was pursued as a collaboration between Hamed Khalili, MD, MPH, of Massachusetts General Hospital in Boston, and researchers from the Karolinska Institute in Sweden. The results of the study were presented at the 2019 Digestive Disease Week. **(2)** The study showed that microscopic colitis (MC) raises the risk of premature death. The increased risk was primarily attributed to cardiovascular, gastrointestinal, and infectious issues. The researchers based that statement on the finding that an MC diagnosis of more than 10 years, increased the risk of death by about 20 % in the study population, compared with those who did not have MC. The increased risk was mostly associated with CC (at 30 %). The

increased risk with LC was listed at 10 %, which calculated out to be a 20 % increased risk for MC in general.

The risk of death was found to increase with time.

The study found that the absolute increase in deaths during the time followed by the study was 1.9% at five years, 1.5% at 10 years, 2.9% at 15 years and 2.8% at 20 years, for MC patients. The fact that the increased risk of death was greater at 5 years than at 10 years is quite concerning, and makes the validity of the data highly questionable. One of the claims of the study is that the risk of death increased with time. Quoting from the article in Gastroenterology & Endoscopy News:

"In sensitivity and exploratory analyses, we observed that the risk of death increased with longer duration of disease or longer duration of follow-up, so that individuals who had microscopic colitis for more than 10 years had about a 30% increase in risk of death."

These are contradictory statements.

If that statement is true, then the absolute increase in deaths at 5 years could not have been greater than the absolute increase in deaths at 10 years. The data appear to be flawed.

The author fails to recognize MC as an inflammatory bowel disease.

A rather troubling aspect of the article involved a reference to the exclusion of subjects who had an inflammatory bowel disease (IBD) or celiac disease.

Excluding those patients was certainly appropriate, since both those conditions could affect the risk of death. But the clear implication of that statement is that neither celiac disease nor MC are IBDs. Actually, they are both IBDs. One would think the author of that article (in Gastroenterology & Endoscopy News) would know better. That illustrates the depth of misunderstanding of MC held by many medical journalists. And where was the editor, when that article was approved for publication?

Dr. Thomas Imperiale raises some very important questions.

Thomas Imperiale, MD, a professor of Gastroenterology and Hepatology at the Indiana University School of Medicine, in Indianapolis, pointed out that the study leaves a lot to be desired. It provides no information on whether budesonide or any of the other drugs used to treat MC raised or lowered the risk of death for MC patients. And there is no specific information on the types of infections, cardiovascular, or gastrointestinal issues, that might have contributed to the increased risk of death. This could have a very important bearing on the results because certain drugs are known to increase the risk of certain types of infections, and various other (potentially fatal) health issues.

The causes of death might possibly be related to the specific drugs used to treat MC. In fact, the increase in risk of death found by the study may be due entirely to the drugs used by medical professionals to treat the disease.

Let's look at the main issue here.

The most important questions concerning this situation appear to be:

1. Does an MC diagnosis increase the risk of death, if the disease remains untreated?
2. Does that risk decrease (or increase) when the disease is treated, and how do the drugs that are normally used by medical professionals to treat MC rate, according to how much they increase or decrease that risk?

Those questions were not addressed by the study.

So basically, the study provided little, if any, useful information. It appears to be mostly a waste of time and money. Rather than presenting convincing evidence that MC raises the risk of mortality, this study appears to be an indictment of the lack of understanding of the disease among medical professionals, and a failure by the researchers to consider the possible adverse effects of drugs. It raises the question of whether the medical treatments being used by the medical community to treat MC might actually be increasing the mortality risk of patients.

We know from published research that chronic inflammation is associated with all autoimmune diseases.

Historically, MC has primarily been treated with corticosteroids. More recently, Anti-TNF drugs, and other immune system suppressants are being increasingly used by some doctors. We know from published research that corticosteroids increase the risk of developing diabetes, cardiovascular issues, and other possible health threats. And we know that the Anti-TNF drugs (the so-called biologics), and other immune system suppressants significantly increase the risk of infection. It's difficult to understand why the researchers failed to recognize, and document, possible drug effects on the mortality rate of patients treated for MC. They are basically trying to claim that the disease itself increases mortality rates, without proving that the mortality rate increase is not actually due to the drugs used to treat the disease.

Dietary treatments for MC are not recommended by most gastroenterologists.

The hospital websites suggest removing gluten and dairy from the diet, but few gastroenterologists seem to be on board with dietary treatments. Yet we know from experience that altering the diet to avoid all inflammatory foods will stop the inflammation from being generated in the first place. Drugs, by comparison, only suppress inflammation after it is created, allowing the inflammation to be regenerated with each meal, if the diet is not properly altered. Since correctly altering the diet can remove all dietary sources of inflammation, it's very likely (although not proven by research), that treating MC by proper diet changes can control the symptoms without introducing any increase in the risk of mortality. And with the removal of all intestinal inflammation, there's no reason why the disease itself would increase the mortality risk.

A more recent study supports our position that MC does not increase the risk of death.

A long-term study of 130 MC patients in France over a period of a median of 9.6 years showed that there was no increased risk of cancer due to MC, either in the digestive system, or elsewhere. **(3)** Furthermore, the researchers reported that none of the deaths in the follow-up were associated with MC.

59 % of the patients used budesonide, and 25% used mesalamine. There were no reports of any adverse events associated with the use of budesonide. The report noted that both age at diagnosis and the use of budesonide significantly increased the likelihood of relapse.

Obviously, the conclusions reached by this report contradict the claims that microscopic colitis is linked to increased mortality.

It's apparent that much of the medical research associated with microscopic colitis is faulty and provides misleading information disguised as facts. That shouldn't be surprising, in view of the fact that so many medical professionals have been generally confused about the disease ever since it was first described. After four decades, the degree of confusion that still exists is very concerning.

References:

1. Gastroenterology & Endoscopy News. (2019, August 16). Microscopic Colitis linked to increased mortality. Retrieved from <https://www.gastroendonews.com/In-the-News/Article/08-19/Microscopic-Colitis-Linked-to-Increased-Mortality/55669>
2. Khalili, H., Roelstraete, B., Burke, K. E., Bergman, D., Sachs, M. C., Olen, O., & Ludvigsson, J. F. (2019, May). 513 - Mortality in microscopic colitis - Results from a nationwide cohort study. 156(6, Supplement 1), P S-101. Retrieved from [https://www.gastrojournal.org/article/S0016-5085\(19\)37043-X/abstract](https://www.gastrojournal.org/article/S0016-5085(19)37043-X/abstract)
3. Loreau, J., Duricova, D., Gower-Rousseau, C., Savoye, G., Ganry, O., Ben Khadhra, H., Fumery, M. (2019). Long-term natural history of microscopic colitis: A population-based cohort. Clinical and Translational Gastroenterology, 10(9), e00071. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/31478957>



Is IBS a Legitimate Diagnosis?

Many of us with MC have been told that we had IBS, until a colonoscopy revealed that it was actually MC. And some of us have been told that we have IBS as well as MC when the treatments by the doctor don't seem to be effective. On the MC Forum, we sometimes joke that IBS stands for a doctor saying "I Be Stymied".

So what is the current state of diagnosing IBS? A very recent scientific article (September, 2019) referenced below examined this, and concluded that IBS is a "disease of exclusion". In other words, it is what is left when tests for other causes of watery diarrhea such as MC, celiac disease, ulcerative colitis, or chronic infections are negative. The final sentence was:

"At the moment, no tests are available to reliably rule in irritable bowel syndrome."

So don't be willing to accept IBS as the answer for why you are having trouble reaching remission. Keep searching for the real answer, such as an unrecognized food sensitivity issue or bile acid malabsorption.

Reference:

AGA Technical Review on the Evaluation of Functional Diarrhea and Diarrhea-Predominant Irritable Bowel Syndrome in Adults (IBS-D). Carrasco-Labra A, Lytvyn L, Surawicz CM, Chey WD. Gastroenterology. 2019 Sep;157(3):859-880. doi: 10.1053/j.gastro.2019.06.014.

