COLONICS

(By Thomas Dorman, M.D. Townsend Letter for Doctors and Patients/July 2006)

Ancient Origins

Colonic irrigation is an ancient method of healing and it would never have survived until the present scientific age if it were without value. It is a curious fact that medical practitioners seem to be either in favor of this treatment (and usually quiet about it) or vehemently opposed to its use. The objectors never have any experience of it. Every grown creature probably has an instinctive dislike of its own waste products, and this may explain why the physician is generally so remiss in examining the feces of his patients. There are indications from ancient documents that the Egyptians and the Greeks practiced colon irrigation therapeutically, although their ideas and the benefit to their patients are unknown to us. Hollow reeds and gourds were used to introduce water through the rectum.

The Reputation of Colonics

I first heard the term *colonics* as a young doctor practicing in California. Immediately, I knew that it was a form of quackery. It is self-evident that the bowel excretes the waste products of digestion regularly, naturally and automatically. There is no need to interfere with nature. This pre-formed opinion (and I am uncertain how it came to be so firmly formed in my mind) was reinforced when I read comments from an official source, that I can no longer identify, condemning the use of colonics by lay practitioners in the state of California and, in due course, the medical association lobbied for its banning through the legislature. This surprised me a little. If something is useless and harmful, why is it necessary to make laws about it? We don't have laws against swimming in sewage nor do we lobby our legislators to make such laws. The only sensible thing any person would do with sewage is dispose of it as hygienically as practical. This dilemma hung in my mind for a number of years. Since then, I have assiduously prescribed diuretics to my patients who retain water, laxative to those who were constipated and, personally, I brush my teeth every day. Think about it for a moment. Which is the cleaner part of your alimentary canal (The alimentary canal is the pipe through which the food passes in your body from mouth to anus)? The mouth is cleaner than the rectum, and yet it is the mouth that I clean with a toothbrush, with paste, and even flossing. Why clean the clean end? I think, in the final analysis, the answer is based on aesthetics. The dirty end should be beneath our dignity; or should it?

My Own Experience

As I have explained in previous newsletters that much of my learning about alternative medicine has come from my patients. To them, I shall be eternally grateful. Learning about colonics is no exception. Patients have told me how their health, their malaise, their fatigue, their abdominal distention, their chronic bowel disturbances, and their dermatitis cleared up through the use of colonics. The first few times I heard the story I knew that the patients were either crazy or the improvement was coincidental. How many times can you hear of such an account and continue to avoid the obvious out of sheer obstinacy? In my case, it was about half a dozen times. My resistance to quackery was diminishing through my experience with chelation, nutrition and, of course, mostly through my experience with orthopedic medicine. Was it conceivable, was it perhaps even possible, that this rather unsavory business with the dirty end of the bowel had something to do with health? I think I resisted recognizing the benefit of colonics longer than my resistance to recognizing other alternative medicine as therapeutic tools because of what I would like to call the sewage aspect of the bowel. It is strange to have to admit

that the conversion and the prejudice occurred when I read a non-medical book, Erewhon, by Samuel Butler (1898), describes a topsy-turvy world where people are ashamed to eat, and do so in privacy, while they deal with and discuss their financial matters in public - the exact opposite of our own habits. Even Samuel Butler did not deal with the sewage aspects, but he did point out that the habits we have are not always quite logical. Once one overcomes the sewage aspect, or what I should really call the sewage prejudice, it actually is rather obvious that just as we clean our skin in bathing, our teeth with brushing, our nails with clipping, our hair with shampooing and combing, it is perfectly logical to clean our colon with irrigation. One might argue that it is not natural in some Wordsworthian or mystical primitive sense, but the same can be said for bathing with soap or using a toothbrush. Having dispensed, therefore, with the prejudicial aspects of this issue, we now need to ask more seriously what do colonics do, when it should be used, what evidence exists, if any, that it is effective, and if there is a benefit from colonics, how might it be useful? Dentists will tell us that keeping the teeth clean protects the hygiene of the mouth and reduces the incidence of cavities. I think they are probably right. I do know that in people with certain illnesses, enhancing excretion of water and electrolytes through the kidneys can improve their health. The most important example of that is when dealing with fluid accumulation, anasarca or edema, for instance in heart failure. It is also quite obvious that if a person is unable to move his bowels, flushing the inspissated (dry and hardened) contents can open the passage so, here, we have a clear indication. If the person's bowels are blocked due to dried up feces, flushing them out will obviously restore the ability of the bowels to move; and, it goes without saying that without bowel movements, obstruction and illness will ensue.

Subtle Conditions

There are many cases where alternative medicine looks at mild degrees of conditions generally accepted in medicine and enhances the public health through catering to them - what in a sophisticated way one might call a forme fruste of an illness. Is constipation good for you? Well, obviously not. How often should the bowels move? In medical school I was taught that there is no rule on this matter. If the bowels move once a week, that is sufficient for some and normal. On the contrary, two bowel movements a day might be normal for others. I now know better. Most people are better off if their bowels move two to three times a day. How do I know? Having developed an interest in nutrition and the function of the bowel, I have developed the habit of asking my patients about the frequency of their bowel movements and can assure the reader that, in general, those whose bowels move two to three times a day fare better in their health and nutrition than those who are more constipated. I do admit, however, that there is no absolutely hard rule on the matter. I would like to discuss some theoretical considerations regarding the benefits of colonics in certain situations.

Effluent Enhancement

Which organ of our bodies is most responsible for waste disposal? It goes without saying that it is the bowel. Yes, in some ways, waste products are excreted by the lungs (carbon dioxide), by the skin, (scaling, sweat), and the kidneys (water and chemicals). The vast majority of waste products of life, however, are passed through the bowel. Some of this waste product is what I call pass through. Frankly, however, the majority of what appears in your stool is excreted, or altered, and therefore not simply a passive pass-through product. Nonetheless, for the purpose of the pass-through products, we can reasonably think of the bowel as a pipe.

The Bowel as an Excretory Organ

The large bowel itself serves to concentrate the contents passed into it from the small intestine, through

the resorption of water into the circulation. Bacterial fermentation occurs in the colon. Several products of fermentation, some of which are only slightly understood, probably serve as useful nutrients when reabsorbed. I phrased this concept in a negative way because it is clear to me that, even in these days of know-all science, a great deal of information is lacking regarding the details of this process. We do, however, know from respectable physiological studies, that many products are excreted into the lumen of the intestines and reabsorbed from that place to circulate back-and-forth, usually through the liver via the venous blood system from the intestines to the liver, called the portal circulation. This enterohepatic circulation, as it is called, plays a very important role in balancing products between the bowel and the liver. An excess of these products in the bowel (for instance, bile salts) can provoke diarrhea. On the other hand, failure of adequate excretion can lead to the retention of toxicants which, in turn, are dammed back into the circulation and can be associated with disease. In this context, we often speak of liver or hepatic failure. We should remember that the liver is the major detoxifying biochemical factory in our bodies and that its waste products are passed through the bile passages (and sometimes with temporary storage in the gallbladder) into the duodenum, then into the small intestine and colon. You can now see how an inherent relationship exists between the excretory function of the bowel in general, including the colon, and the biochemical excretory factory, the liver. It is not at all surprising, therefore, that by enhancing excretion through the bowel, we can indirectly enhance excretion by the liver, the main detoxifying factory of the body. On thinking this over, these observations make such plain common sense, based on simple knowledge of anatomy and physiology of the gastrointestinal and hepatic tracts, that, in retrospect, I am amazed at my own stupidity for not working these things out for myself many years ago. It was a salutary experience to read references about this in some books lent to me by a colon therapist friend, Dirk Yow, CCT, GOK, and see that these ideas are by no means new. We might next ask how colonic therapy increases the excretion of waste products through the pipe we call our colon.

Increase in Peristalsis

We know that a lot of movement in the pipe of the body occurs through peristalsis. The action of the heart muscle is one such example, although, of course, the blood does not go backwards into the chambers because of the valves' action. These valves are flaps of fibrous tissue that come together and stop return flow. Valves are present in the veins, as well, directing the blood in the appropriate direction. The lymphatic system has valves, and the term valves is also used in reference to the pipe we call our gastrointestinal tract, or gut. Muscles contract in a rhythmic manner, causing a wave of contraction down the pipe. This is seen be on inspecting the movements of the esophagus and the small intestine. Yet because these organs do not have one-way valves, like those in the heart, fluid can travel back-and-forth in spite of these peristaltic waves. Indeed, the digestive processes in the gut are dependent on slushing the fluid, the digestive juices, mixing them and churning them, and therefore this peristaltic phenomenon is not exclusively unidirectional. Peristalsis as such, however, is not a prime feature of the large bowel. Here we speak of contractions of the whole organ, or at least sections of it, particularly contractions of the longitudinal fibers, and large quantities of contents are propelled forward, and occasionally backward, through what is called mass action.

Most people are familiar with the phenomenon that the urge to move their bowels occurs sometimes after a meal, typically breakfast, and very often after ingesting a stimulant such as coffee. This is an example of a generalized contraction of the organ (the colon) that propels the contents into the vestibule where it is held temporarily before evacuation. The contents of the small intestine pass through the sphincter which separates it from the first part of the colon, called the *cecum* (on the left side of the abdomen), and the circular muscle at the lower end of the terminal ilium, the small bowel, is indeed

mostly contracted or closed. The liquid contents of the small intestine are squirted in small quantities, following peristaltic activity, into the cecum. The cecum itself serves predominantly as a reservoir, the site where the dehydrating process begins and the site where bacterial fermentation begins and occurs predominantly. The cecum is, to a certain extent, a dead end, and its appendage, the appendix, is a complete dead end. It is in the appendix, of course, that chronic inflammation and infection occurs most frequently - hence the disease of appendicitis.

It is interesting that there are accounts of instances in which casts of a colon's lining are reputed to be excreted en masse. Almost certainly, these instances represent mostly a combination of shed lining from the cecum with contents that had become inspissated and adherent to the lining of the cecum - the continuous flow of contents from the small intestine into the bowel beyond the cecum, passing through these concretions. There are multiple, though infrequent, accounts of people passing contents from their bowels that are recognized to have been ingested a long time earlier. These concretions likely have been held in the periphery of the cecum, while the otherwise continuous flow of contents passes through the center of the cecum into the ascending colon. It is also not unlikely that some of this phenomenon of sluggishness, of stasis, at the bowel surface can occur in the ascending and transverse colons, as well, with the contents merely going through the center and being propelled through the phenomenon of mass action. Is it an advantage for a person to have longstanding concretions in this organ? Of course not. I must report, however, that in the process of inspecting the lining of this organ with a colonoscope, a procedure that I have had occasion to perform many times, one does not ordinarily see large residues in this site. How might this be? How can it be that there are reliable accounts of these casts that are not seen by the endoscopist? I have come to the conclusion that the answer is that, in preparation for endoscopy, the patient invariably is asked to take a strong purgative to clean out the contents of the bowel so the endoscopist can indeed inspect the lining. These purgations must remove any material that might have been static in this situation and therefore are not observed when the endoscopic inspection is performed.

Stimulation of the Lining

The process of irrigating the bowel can, in many instances, have a stimulatory effect on the cells lining this organ. As the business of these cells is to provide mucous and facilitate much of the excretion, it is not surprising that stimulating enhances this effect. Can they be stimulated merely by contact with water? Probably to a slight degree; but it is more likely that bringing the cells in contact with certain herbal agents, and possibly chemical agents, enhances this effect. For instance, it is well-known in conventional medicine that the addition of magnesium sulfate to the contents of the bowel causes the lining to pass more water into the lumen, and the patient develops diarrhea. This is a purgative effect. A number of herbal agents are known to have other effects on the linings. Terms such as carminative, mucousenhancing, relaxing, stimulating, and enhancing excretion are all used, and a number of specific herbs have a number of specific actions along these lines. This is not mysterious. If you were to drop some lemon juice into your mouth, would you not experience an increased flow of saliva? Does peppermint not clear the passages by causing shrinkage of swollen lining? Why should these botanical preparations not have a similar effect on the lining at the other end of our gut? Of course, they do. Experience in colonic circles is growing with the use of a number of specific herbal agents that can be mixed gently into the warm water passed into the colon for irrigation; so that individuals with a tendency to spasm are given relaxing agents. Conversely, individuals whose bowels are too relaxed might benefit from a mild contractile stimulant. You see that none of these considerations are particularly mysterious. The skill and experience of using the right herbs in combination is, however, still something of an art, and not all individuals respond equally to all herbal stimulants. The skillful colon therapist will therefore introduce

small quantities of proposed remedies at a time and evaluate the response before proceeding.

The use of Ozone

Do the cells of our body breathe? Do they use oxygen to enhance their metabolic activity? Clearly the answer is yes. The large bowel is an environment that tends to be somewhat deficient in oxidative power. This lack is associated with the anaerobic contents. An anaerobic environment is where the concentration of oxygen is low, or very low. Enhancing the oxidative power in environment of the colonic cells has an effect that cleanses the cells of anaerobic bacteria, at least temporarily, and gives them a metabolic boost. This phenomenon has an invigorating effect on the cells, just as exercise does on the circulation in the muscles, where there is temporarily an increase in oxygen utilization. One hypothesis about the incidence of certain kinds of bowel disease, such as the appearance of colon cancer, is that the disease is associated with a decreased metabolic rate in an anaerobic environment. Therefore, it is quite possible that periodic enhancement of oxygen utilization, such as occurs with the addition of ozone to the colon enema water, might have a beneficial effect. This seems to work symptomatically but, of course, we do not have enough information to judge whether it has an objective, protective effect against the development of cancer. However, we hope this will be a subject for interesting long-term study. Clearly, the tendency for toxic materials to accumulate in the cells lining the bowel is reversed through enhancing the oxidative process. You will gather, therefore, that the addition of small quantities of ozone-containing oxygen in solution containing the water used for colonics seems to have a beneficial effect.

Other Bacteriologic Consideration

I have alluded to the nature of the bacterial contents of the bowel. Ordinarily we carry an enormous load of bacterial species, both in quantity and variety. The fermentative process that occurs in the bowel bears a relationship to health and disease. The contemporary habit of using large quantities of pharmaceutical agents that alter the nature of the bacterial contents (antibiotics in particular) has a strong effect in changing the composition of these internal residents. It was believed (and in certain circles is still believed) that, with the exception of the bowel, the inside of the body is entirely sterile. From Enderlein's research, and that of others, we have come to recognize that the endobiontic relationship in the cells is more complex and that almost certainly life forms (*microzymas* in Béchamp's terminology) are present in most living cells. These life forms are, however, in a form (or valency, to use Enderlein's term) that does not encourage independent proliferation. That is why, when cultures of cells (for instance, of the blood) are taken from healthy people, bacteria do not ordinarily grow out on the culture medium, or the plate. This contrasts with culturing the contents of the bowel. It is, however, believed that in certain circles - those that I might reasonably call the pleomorphic medical subculture - a relationship exists between the bacterial forms overtly present in the intestine and those covertly present in the intracellular milieu. This is one of the reasons that the use of antibiotics, particularly when taken by mouth, is considered to be deleterious. Use of antibiotics changes the composition of the bacteria in the intestine, probably encouraging the development of cell-deficient forms that most likely interact, or penetrate, into the intracellular environment with greater facility and thereby probably accelerate the degenerative process - in Enderlein's terminology, "raising the valency of the endobionts.

There is little conventional hard research on the detailed composition of the bacterial contents of the bowel. The problems relate to the difficulty in culturing the bacteria and separating the species in an artificial environment and quantifying them on culture plates, etc. The anaerobic bacteria (those that thrive without oxygen) are fastidious organisms in the laboratory environment, but the culture of the aerobic bacteria sometimes give us useful clues about unfavorable changes in the composition. This,

incidentally, is one reason why nutritionally oriented physicians often ask for bacterial cultures on specimens of stool.

What effect do you think irrigation might have on this zoo of organisms? Irrigation certainly dilutes the organisms, removes concretions of residual material, and probably facilitates a freshening-up of the fermentative process and participants. The introduction of the bacteria that we ordinarily regard as favorable to the intestine, such as the Lactobacillus, is best done at this time, and some clinics afford the colon therapist an opportunity to introduce appropriate instillation of bacteria, particularly in this category, at the end of treatment.

Other Ways of Manipulating the Colonics

Changes in the volume of fluid, the pH, and salinity can, of course, have an effect on the bowel. The colon therapist can also judge the temperature of the irrigating fluid, to a small extent, further altering the behavior and reaction of the cells of the lining of the bowel.

Stretching

When fluid is passed into the colon - and particularly when it is passed in skillfully, without introducing any gas, such as air - a gradual distention of the organ occurs. It should be remembered that the colon is a flexible, irregular tube contained within the flexible, irregularly structured abdominal cavity. An increase in the pressure of the lumen of the bowel has an instantaneous effect on the pressure of the rest of the abdominal contents. From this point of view, the relationship one to the other is like that of fluid in a hot water bottle.

Is stretching the colon a good idea? My answer is a clear yes. And here, I take the liberty of making a comparison with stretching the fascial layers of the body elsewhere. After all, what is the colon? It is a fascial bag with an outside lining called the *serosa* and an inside lining called the *mucosa*. There are some muscular thickenings within the fascial bag called circular and longitudinal muscles (*tenia*), the action of which we have already discussed when reviewing the weak peristalsis of the colon and the strong mass action (longitudinal bands) earlier. When we stretch the body itself, the fascial layers of the trunk and the limbs and those around the axial skeleton improve the alignment of the contents. The stretching evens out tensions and restores function. We sometimes speak of the *tensegrity model*, when discussing this, because there is a relationship amongst the tension of all the components of the system to all others. Does this consideration apply to the internal organs? Of course, it does. One way to improve the overall function and integrated action of the colon is by stretching the organ, and it is quite plain that the only available way for stretching is through the installation of water gradually under slight-to-moderate pressure through the anal canal. This process is why colon therapists report that after these irrigations they retrain the bowel.

Retraining the Bowel

An important benefit of colon therapy is this business of retraining the bowel. In civilized society there is a tendency to defer the urge to defecate for social reasons. A person might be in a board meeting or any other assortment of social engagements. The mass action that might have been initiated by the mid-morning coffee, loading the rectum, is ignored. The contents might either stay in the rectum or shift back into the descending colon. Further inspissation and toxic absorptions are now likely to take place and, after ignoring the urge to stool repeatedly, the phenomenon of a regular bowel evacuation occurs less frequently. The bowel is trained in bad habits. It is true that the fermentation in the bowel is apt to lead to flatus in the circumstance, but many civilized men ignore that stimulus, as well. The

phenomenon of rehydration and stretching the colon, particularly when combined with education of the subject that a call to stool should not be ignored and should, in fact, be solicited from the bowel, so to speak, two to three times a day at regular intervals - will restore normal colonic function and indirectly enhance the person's health substantially. Accordingly, it is an important role of the colon therapist to educate patients in combating constipation and generally improving bowel habits. Many of these benefits can be permanent after a series of, say, 10 treatments at one-two treatments a week. It is up to the physician, in my opinion, to select the patients in whose cases this treatment should be recommended.

Colonic Illnesses

Is there a place for the use of colon irrigation (colonics) in patients who have illnesses such as ulcerative colitis, chronic diarrhea, chronic dilatation of the bowel (such as Hirschprung's disease), a tendency to spasms (often called irritable bowel syndrome), and diverticulitis? My answer to these is affirmative in all the cases. It is, however, true that the colon therapist needs to be skilled. Excessive distention, in the case of diverticulitis or ulcerative colitis, may theoretically pose the risk of leakage, although I have never encountered such a case. The use of remedies in the contents of the bowel needs to be practiced with skill and experience.

Technique

Before concluding this article, a comment about technique: the modern colon therapist will use an instrument that allows both irrigation and a continuous exchange of fluid in and out of the bowel. The instrument will allow the therapist to have continuous inspection, through a glass component of the outflow pipe, to inspect the contents of the effluent. The experienced therapist will learn to recognize when the effluent indicates enhanced excretion from the bowel proper, from the liver indirectly through the bowel, or merely when particles of stool are washed out. With modern technology, the procedure is both comfortable and entirely hygienic, without unpleasant aromas or any spillage. The practical details vary little between therapists, but essentially a small tube is passed, with the individual in side-lying position, into the individual's rectum. Most colon therapists then choose to place the patient on his back, and the irrigation takes place in this position. Typically 10 colonic treatments, perhaps, at four to six day intervals are recommended for most conditions. Many people who have significant, but not inherently destructive disease, such as the examples given above, can obtain life-long benefit from a series of colon therapies without the necessity to follow-up, although certain individuals do benefit from infrequent follow-up over long-term.

Conclusion

In summary, I have come to the conclusion that colon therapy is not mysterious. Indeed, I find that colon therapy is a useful adjunct to detoxification in a variety of illnesses in which the accumulation of toxins plays a major or contributory role to a person's ill health. Washing the lining of the bowel is just as sensible as maintaining cleanliness in other parts of ourselves especially since the modern living environment, presents a tendency for the accumulation of toxins, increased constipation, and increased concentration of the residue in the bowel because of a shortage of roughage in the diet. Thus, cleaning and irrigation is an advantage.

Dr. Alexander Yuan Optimum Health Centre www.naturalhealing.com.hk info@naturalhealing.com.hk