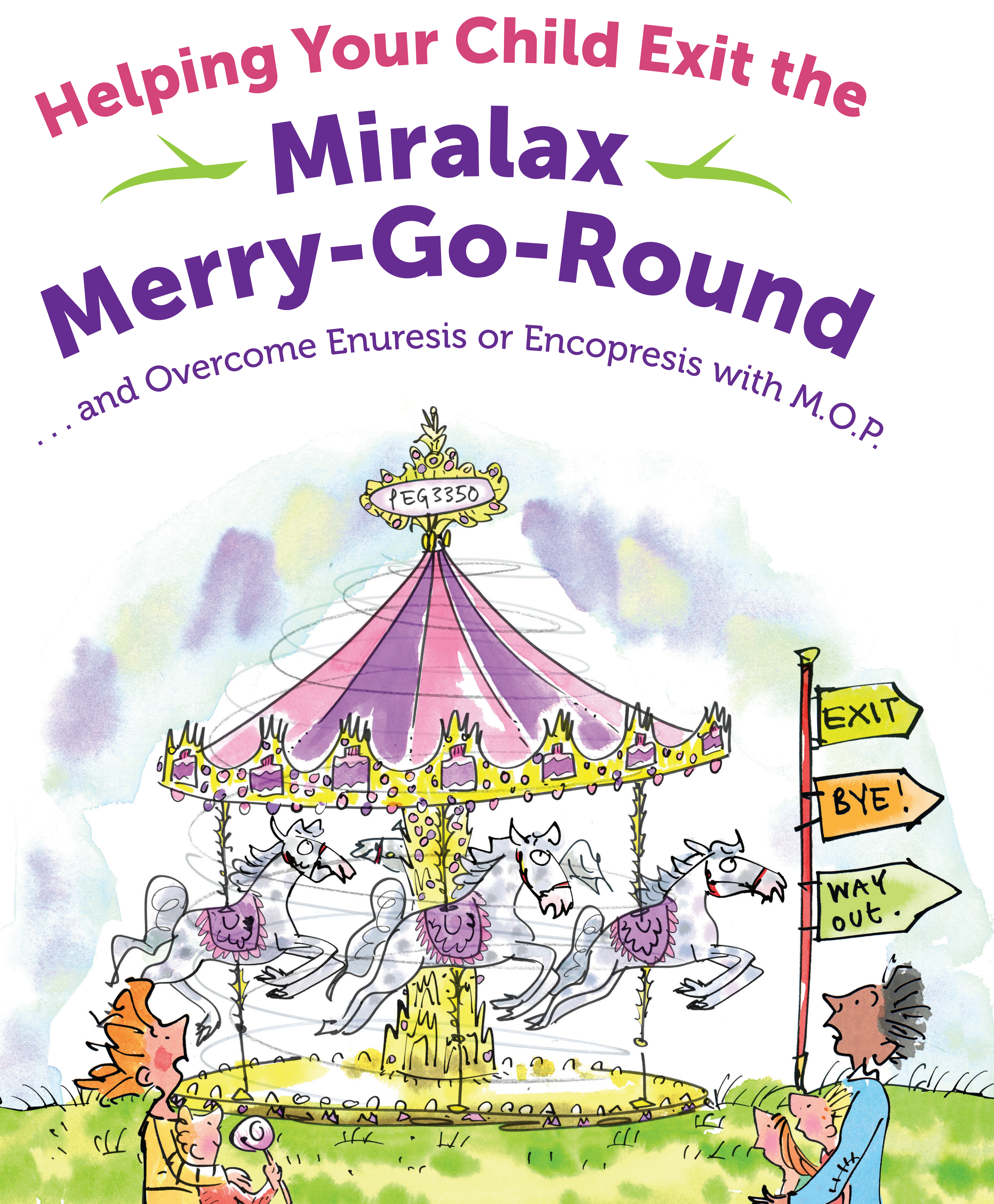
Helping Your Child Exit the Miralax Merry-Go-Round

. . . and Overcome Enuresis or Encopresis with M.O.P.



BY STEVE HODGES, M.D.

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Introduction

I've treated enuresis and encopresis for 20+ years, and if there's a one insight I could share with my younger self, it's this: *Miralax won't cut it.*

In my early years as a pediatric urologist, I treated bedwetting and daytime pee and poop accidents the way I'd been taught: with PEG 3350, the laxative powder sold as Miralax, Restoralax, Osmolax, and generic brands. If a daily capful of Miralax didn't help, I'd recommend high-dose Miralax "clean-outs," followed by a daily "maintenance" dose.

But more often than not, accidents would persist or worsen. Parents would bring their kids back and ask: *"Now what?"* I'd offer the only answer I knew, the one most doctors worldwide still offer: more Miralax. Then more.

That's how children end up on the Miralax merry-go-round, a slow-moving carousel to nowhere.

I didn't coin the term — I first heard it from a mom in our private Facebook support group, whose son had struggled with encopresis for three years. She wrote: "Doctors put him on Miralax, but we kept going in a circle: weaning and then more constipation and more accidents. After all this time on the Miralax merry-go-round, nothing is changing." The boy was still in diapers.

> **"In science, we tend to get in a rut and then dig in. We have to be open minded."**
>
> — Dr. Gideon Lack, as quoted in *Blind Spots*

That's a common scenario. I have patients who, prior to visiting my clinic, were told to undergo Miralax "clean-outs" every month for a year. Or every weekend for months. **I've known teens who'd spent an entire *decade* on Miralax and were still wetting the bed.**

In some respects, "Miralax merry-go-round" is a fitting metaphor. After all, the child is going in circles, never moving forward. But in other ways, the term is far too rosy. **Carousels are fun! Miralax, taken endlessly and futilely, is not.** As one mom in our support group posted:

> *We did the Miralax merry-go-round with my daughter for about a year. At every doctor's visit, they would up the dose until it was 4 caps a day for a 2.5-year-old. She would withhold withhold withhold, up to a week and a half, and then have explosive diarrhea that she cried through while clinging to me (poop EVERYWHERE despite a diaper).*

Another mom reported that at age 4, her daughter was having up to 20 poop accidents a day, causing "ulceration of the skin around her anus." And yet, she wrote, "For three years, our pediatrician and pediatric GI specialists did nothing other than recommend more Miralax and clean-outs, which would help for a couple of days, then she would regress again. I was at the end of my rope. It was so stressful and emotionally draining."

Parents dutifully follow through because they're not offered an alternative. "Oral clean-outs have never really helped us, but we have done them, anyway, to appease our GI," one mom posted.

Needless to say, appeasing your doctor should not be the goal of treatment! **There is a better way: the Modified O'Regan Protocol (M.O.P.), an enema-based approach that is far more effective than PEG 3350 alone.**

Based on the research of Sean O'Regan, M.D., a pediatric kidney specialist, M.O.P. involves daily enemas (such as glycerin, phosphate, or docusate sodium) for at least 30 days *and* until accidents stop, at which point the child gradually tapers off enemas. Most M.O.P. variations include laxatives, too, but as an adjunct to enemas or a later step in treatment, not as a stand-alone starting point. The six M.O.P. variations are spelled out in *The M.O.P. Anthology 5th Edition*, our comprehensive treatment manual. The book also details the history of Dr. O'Regan's regimen, which he devised in the 1980s to treat his own son's bedwetting. Based on his son's success, Dr. O'Regan tested the regimen on French Canadian children, publishing multiple groundbreaking studies.

"I wish we'd done M.O.P. sooner and that doctors were more open to it, because months of traumatic accidents is exhausting. I'm not anti-Miralax, but it was not sufficient. M.O.P. gave us our lives back."

"M.O.P. was the first thing that made sense — and gave me 'permission' to do something besides Miralax," wrote the mom whose 2.5-year-old once took 4 caps of Miralax per day. "It was life changing." She added: "With most medical issues, if a medication doesn't work, you try something else. Why is that not the norm with childhood constipation? Especially since an alternative exists."

This guide isn't a diatribe against Miralax. I'm not opposed to PEG 3350. I believe it's safe for most children, though I take seriously the reports of Miralax-related mood changes and encourage concerned parents to use alternatives, such as lactulose, magnesium hydroxide, or magnesium citrate. For many kids, osmotic laxatives can be quite helpful, softening stool so pooping is easier and less painful. Heck, I gave Miralax to my own children. But my kids didn't have enuresis or encopresis. **Most children constipated enough to have pee or poop accidents require far more robust treatment than PEG 3350 alone.**

In this guide, I explain why PEG 3350 so often fails and why doctors keep prescribing it, anyway. I cite illuminating studies and offer advice from parents who've navigated their child's transition from Miralax to M.O.P.. I also discuss three scenarios where PEG 3350 and alternative laxatives are useful in kids with encopresis and/or enuresis. To be sure, M.O.P. is not a bullet train. Setbacks are common, and progress is rarely linear. Your child's ride will have its ups and downs. **But remember: Chronic constipation didn't develop overnight. It won't resolve instantly, either, but the M.O.P. approach works.** I've never met a parent who said, "I'm so glad my child spent 5 years on Miralax." But I've met countless folks who wish their child had tried enemas from the get-go. As one mom posted:

> *We did nearly 4 years of PEG and regular Ex-Lax and clean-outs. When we started M.O.P., poop accidents stopped immediately, and we've gone from almost daily pee accidents to now dry. If I could go back, I'd do M.O.P. right from the start. My son no longer has to go through the embarrassment of having wet and dirty pants and having to discreetly get changed into clean clothes. He finally has his life back."*

Let us know how we can help your family!

Warmly,

Steve Hodges, M.D.
Professor of Pediatric Urology
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Why Miralax Fails

In his classic essay on preparing for a colonoscopy, humorist Dave Barry describes the aftermath of drinking a "nuclear laxative" called MoviPrep:

Have you ever seen a space shuttle launch? This is pretty much the MoviPrep experience, with you as the shuttle. You spend several hours pretty much confined to the bathroom, spurting violently. And then, when you figure you must be totally empty, you have to drink another liter of MoviPrep, at which point, as far as I can tell, your bowels travel into the future and start eliminating food that you have not even eaten yet.

I can relate! By the time I checked in for my own colonoscopy, any stool in my bowels had been power-washed into oblivion. Light-headed from fasting, I thought: *It's so easy to get empty! Miralax clean-outs should totally work for constipated kids.*

But they don't. That's because my patients are clogged with crusty, old stool, whereas I wasn't constipated to begin with. The mega-dose of laxative I chugged didn't have to accomplish much. It was like taking a shower when you're already pretty clean. For my patients, on the other hand, a **Miralax clean-out is like showering with a trickle of water when you're caked with massive amounts of hard, sticky crud** — or, as one mom described it, "chipping away at a cement block with a garden hose."

For children with enuresis and/or encopresis, most high-dose Miralax clean-outs typically lead to one of three results:

The liquid cleanse washes past the impacted mass of stool. So, the child ends up with diarrhea *and* constipation — "a big, poopy mess."

The laxative propels poop downstream, further clogging and stretching the rectum. That's why pee and poop accidents may worsen.

The rectum actually does empty — temporarily. Even daily MIralax doesn't prevent many of these kids from filling right back up.

"My daughter, with day and night enuresis, pooped daily, so no one thought she was constipated. Doctors advised a laxative clean-out, then daily Miralax for 2 weeks. After no improvement, more Miralax. After months of worsening accidents, they added Ex-Lax. This just created a lot of urgent poop accidents."

"With the clean-out, we had major output, like an ice cream machine for DAYS. Then, we were on the Miralax merry-go-round for years. Has not helped."

"I couldn't get doctors to agree to anything but PEG. Symptoms got worse. An x-ray at the ER showed an impacted rectum stretched to nearly 3x normal — after nearly 4 years of daily PEG and clean-outs, the last one 10 days before the x-ray. The ER doc told me to give PEG. I laughed."

“Our doctor said my daughter would be cleared out and in control by a Miralax clean-out and then 1 cap a day. It would be hilarious if it wasn’t so maddening.”

“A clean-out is like a strict diet to lose 5 pounds: The effects are temporary. As soon as the cleanse was over, my daughter started to fill back up.”

Why doesn’t daily Miralax keep the tunnel empty? Because an enlarged rectum is a floppy rectum, with compromised sensation and tone. When the rectum is healthy and elastic, the arrival of stool in this organ activates receptors that tell the brain it’s time to poop. **But in a child with a stretched rectum, it takes an mondo poop pile-up to trigger that urge — if the child feels the urge at all.** Meantime, the rectal bulge continues to aggravate the nearby bladder nerves. That’s why some kids achieve dryness immediately after a clean-out, only to have wetting return, within a few weeks or even a few days.

Even when constipated children do sense the urge to poop, they often override the signal out of habit, a scenario parents refer to as “withholding.” I don’t love that term because it suggests willfulness, as if kids are “refusing” to poop. Most of my patients don’t even realize they’re overriding the urge. To them, it’s second nature, a reaction that typically stems from a history of painful pooping or even a single painful bowel movement (not from behavioral or psychological issues, as many adults mistakenly assume).

Resolving chronic constipation requires two steps: 1.) cleaning out the rectum, and 2.) keeping the rectum empty for at least three months so it can retract back to size and regain normal tone and sensation. Miralax tends to fail on both fronts.

In truth, even a daily enema regimen can fail on both fronts, a state of affairs that shocks and dismays many parents. In those stubborn cases (it’s the rectal clog that’s stubborn, not the child!), I recommend the more aggressive M.O.P. variations. Regimens involving overnight olive oil enemas — DOUBLE M.O.P. and J-M.O.P. — are designed to help with Step 1. Regimens that stimulate two bowel movements per day — MULTI-M.O.P. and M.O.P.x — help with Step 2. You may need to experiment for a while to find the protocol most effective for your child, and you can mix and match regimens, too. Flexibility and patience are important.

Remember: It took years for a child’s rectum to stretch to the point of losing sensation and encroaching upon the bladder nerves. This organ won’t spring back instantly. But with appropriate treatment and time, virtually all cases of encopresis and enuresis will resolve. In the rare case that enuresis persists, bladder Botox can halt the accidents for good.

Helpful Reading:

- Why Is Your Child Constipated? Because We Live in the 21st Century
- “Potty Regression,” “Potty Refusal,” “Not Fully Potty Trained”: Why These Terms Should be Canceled
- The “Long Lag”: Why Bedwetting Takes Longer to Fix Than Daytime Accidents

Why Doctors Push PEG, Anyway

Given how often PEG 3350 fails in children with enuresis and encopresis, you might wonder: *Why does this stuff have such a hold on doctors?*

One mom in our support group posted a theory: "Miralax was thrown at us time and time again, only to cause worse issues. I swear, Miralax must have something handy written in all physicians' study materials. Well played." As a doctor who relied on Miralax for years, I don't see nefarious motives but rather an institutional lack of training and curiosity. More specifically:

Enuresis and encopresis rate little attention in medical school.

One of my own urology residents told me bedwetting was "brushed off" at his top-notch medical school, considered "not super sexy or exciting to treat because it's not life-threatening." Although "pediatric urologist" sounds like a bedwetting specialist (if not us, then who?) in reality, we're surgeons who mostly fix congenital anomalies. Pediatricians, too, learn little about enuresis and encopresis, let alone alternatives to Miralax. When the standard treatment fails, many doctors throw up their hands and hope the child outgrows the accidents.

Doctors don't grasp the toll accidents take on families.

The American Academy of Pediatrics calls enuresis "not a serious health problem," and physicians often dismiss accidents with, "Don't worry, she'll outgrow it." **But many children don't outgrow accidents — at least not before they've been teased, shamed, humiliated at school, even suspended or expelled.** Children with enuresis and/or encopresis often avoid play dates, sleepovers, and summer camps and become withdrawn or depressed. Parents, too, often feel helpless, dreading birthday parties and cancelling family vacations for fear their child will wet the AirBnB mattress or poop in the motel pool. One mom posted she'd spent "thousands on products like waterproof undies and 'emergency packs'" and had experienced "so many lost weekends and stress."

But families tend not to reveal details like that during a quick doctor's appointment. I've gained much insight from our hidden Facebook group, where parents feel more comfortable sharing their distress. Parents often describe the sheer terror of a simple outing — "the fear that your child might have an accident and either try to ignore it or cover it up or freak out and freeze, not knowing how to get back to clean up without the other kids recognizing what's going on." **I suspect that if more doctors knew all this, they might look beyond Miralax.**

> **"Few people are willing to do the hard work of reevaluating their beliefs to account for new information."**
>
> — Dr. Marty Makary, author of *Blind Spots: When Medicine Gets It Wrong, and What It Means for Our Health*

3. Doctors don't realize how clogged their patients are.

I did not understand constipation until I began x-raying my enuresis patients, a practice I adopted after reading Dr. O'Regan's research. **On film you can see just how colossal that mass of stool can be. The size of a baseball, a grapefruit, even a Nerf basketball — you get the idea!** By measuring rectal diameter, you can confirm just how much the rectum has been stretched. A normal rectum is no wider can 3 cm; most of my enuresis patients have a rectum two or three times as wide.

But most doctors don't x-ray for constipation. They simply feel the child's belly and ask parents about the child's pooping history. Or, maybe they do a "transit test." Not only are those measures highly unreliable, but even when doctors correctly diagnose constipation, many vastly underestimate the extent of the clog. Constipation is not an either/or condition; it's a matter of degrees. And children with enuresis and/or encopresis, tend to be on the extreme end.

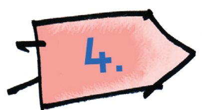
It took me years to realize a child's clogged rectum can take *months* to empty and, without aggressive measures, can refill quickly. **The American Academy of Pediatrics still doesn't get it.** On its web page about encopresis, the AAP states: "For the first week or two the child may need enemas, strong laxatives or suppositories to empty the intestinal tract so it can shrink to a more normal size." The AAP is drastically understating the problem. Certainly, a week or two of enemas can, and often does, halt poop accidents. But that's only the first step in a lengthy process. In my experience, the AAP's recommended maintenance guidance — oral laxatives and scheduled toilet sits — will not reliably produce lasting results (and scheduled toilet sits often cause power struggles while accomplishing nothing positive).

"I can't even count how many specialists and pediatricians we have been to, and Miralax is always their go-to. We literally have to arm-wrestle them to try anything else. So, I say: *Get off the carousel, even though 100 physicians will say otherwise.*"

I suspect more doctors would look for better treatments if they routinely x-rayed their enuresis patients. Unfortunately, there's an institutional bias against x-rays, especially outside the United States. Even doctors who x-ray their patients often misinterpret the images or rely on radiologists who misinterpret them, due to lack of training in this area. A pediatrician recently emailed: "Lots of films are read by radiology as normal even when the kid is backed up. It takes courage and confidence to go against their reading, since they are the 'specialists.'" **What matters is stool in the rectum, not elsewhere in the colon.**

"The doctor insisted enemas would be traumatic, but after my child came home crying that she pooped her pants at school and sat in poop for an hour because she didn't want anyone to know, we decided to try M.O.P. M.O.P. gave us our lives back."

I met with a 16-year-old and his mom after the boy, who had nighttime enuresis, became so severely constipated that he landed in urgent care because of the pain. "The urgent care doctor told my son enemas at his age are dangerous, and said he just needs a stool softener," the mom told me. The idea that a stool softener could resolve this kid's chronic constipation and enuresis is preposterous. But this kind of thing happens all the time.



Doctors engage in "medical groupthink."

"Medical groupthink" is a phrase Johns Hopkins surgeon Marty Makary, M.D., uses in his book *Blind Spots* to explain why **doctors endorse practices that defy scientific evidence and common sense.** In the medical profession, he argues, "consensus is not driven by science but by peer pressure" and "tunnel vision." I tend to agree.

Further, Dr. Makary observes, "Few people are willing to do the hard work of reevaluating their beliefs to account for new information." Indeed, I did not reevaluate my own beliefs about Miralax until I performed a particular surgical procedure on a 6-year-old. (I tell the whole story in the *M.O.P. Anthology*.) Only when confronted with a giant rectal mass of stool that I had completely missed — in a patient who took Miralax and who was deemed "not constipated" by a standard questionnaire — did I experience a career-changing epiphany.

Bandwagon thinking not only colors my profession's idealistic view of PEG 3350 but also perpetuates an extreme and unfounded anti-enema bias. Many doctors assume enemas are traumatic and boldly tell parents so. One mom told me: "When I brought enemas up to our doctor, he said, 'There's no way I would do that to my child.'" Another mom said, "When my child told the doctor she liked enemas because she felt better, her statement was immediately dismissed with 'No, you don't. No one likes them.'" One physician told a mom enemas would "scar your daughter for life," and — unbelievably — another MD told a mom enemas could "turn a kid homosexual." Anti-enema bias, both subtle and overt, also pervades scientific literature.

It wasn't always thus. Enemas are as old as medicine, referenced in the ancient Egyptian Ebers Papyrus and touted by Hippocrates circa 400 B.C.E. When I asked Dr. O'Regan if any of his patients suffered complications, he said, "Our only complication was a 7-year-old girl who clogged the toilet at our hospital after an enema. She was legendary." In other words, the damage was to the plumbing, not the patient! Yet, doctors today insist, without evidence, that enemas harm children.

The medical literature reveals a shift in the perception of enemas, from ordinary and effective in Dr. O'Regan's day to coercive and traumatic today. Consider: In a 1985 study on children with severe encopresis, Johns Hopkins researchers described their enema regimen as "highly effective," "easy to perform," "involving minimal risk," and "the treatment of choice for encopresis." They noted the protocol's success encouraged families "to cooperate with the treatment regimen." Yet in a 2017 book chapter, a psychologist describing that study disregarded the regimen's success and noted the children "were made to use enemas" — in other words, were forced into a traumatic treatment.

Certainly, many kids are apprehensive (our Enema Rescue Guide helps on that front), but most are grateful for an effective alternative to Miralax. Many kids as young as 5 or 6 can insert enemas on their own, maintaining control over the process.

Helpful Reading:

- Blind Spots: Brilliant Book Explains Bedwetting Without Even Mentioning It
- Even Severe Constipation Goes Undiagnosed in Bedwetting Children. Here's Why
- To Help Bedwetting Children, We Need a New Definition of Constipation

4 Reasons to Exit the Merry-Go-Round

M.O.P. has its ups and downs, but unlike the Miralax merry-go-round, takes kids to a destination.

PEG 3350 sounds far easier to manage than enemas, and parents assume their child will outgrow accidents, anyway. So why go to "extremes"?

I understand this thinking! It's true that drinking a "flavorless, odorless" powder seems easier than inserting an enema. It's also true that most kids eventually stop wetting without treatment. However, about 2% — millions of kids worldwide — continue bedwetting into adulthood. The kids least likely to overcome bedwetting spontaneously are those who 1.) rarely have dry nights and/or 2.) also have daytime pee or poop accidents. In my experience, continuing an ineffective treatment benefits nobody. If you're unsure about moving on from Miralax, consider:

The longer you wait, the more challenging treatment becomes.

It's never too late to treat enuresis or encopresis — plenty of kids overcome these conditions even when they start treatment in high school or college. There is *always* a solution. However, a rectum enlarged for 15 years takes longer to empty and heal than a rectum stretched for a year. **Delaying treatment usually means more months on M.O.P.** Treating a child in kindergarten will be easier than treating the same child in 8th grade.

One mom in our support group urged newcomers not to put off enema treatment in hopes their child will outgrow the accidents: "My son is 14 and JUST now healing. Our pediatrician said enemas are traumatic. You know what's traumatic? Pooping in your pants in front of your

classmates in 7th grade. Help your child before it gets to that point. If you act like enemas are traumatic, then they probably will be. If you act like they are normal and helpful, they probably will be."

"I wish I could go back in time and start M.O.P. a lot sooner. The risks of undertreating this condition far outweigh any risk there is to overtreating it."

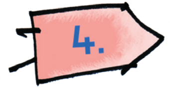
As accidents persist, kids' self-esteem plummets and distress increases.

I often hear, "Oh, he's only in preschool, so accidents are no big deal" or "He's only 6, so he doesn't mind wearing pull-ups to bed" or "We're supportive parents, so she's not bothered by the bedwetting." **But the longer accidents continue, the more anxiety kids feel about sleepovers, summer camps and college.** Even young children may feel more embarrassment than they let on. Pelvic floor physical therapists tell me that when children are out of earshot of Mom or Dad, they reveal deep shame and a fear of disappointing their parents. One mom posted: "The longer this goes on, the more havoc it wreaks on the entire family. Even in a positive, loving environment, your child still will endure years of desperate attempts to right the situation."

"My son, now in college, suffers from low self-esteem. He is as easily wounded as a ripe pear and will usually choose isolation over connection. We did not find M.O.P. until he was 10, when he was becoming the Kid Who Smells Like Poop."

The longer some kids take Miralax to no avail, the more they dislike it.

PEG 3350 is often a helpful tool, especially once accidents have resolved. But many children who had a negative experience with Miralax early in treatment become averse to taking it (or any osmotic laxative) later on. One mom of a child on M.O.P. posted that after fruitless years of Miralax, her daughter won't even consider taking it — no matter how many doctors tell the girl that PEG 3350 is a "colorless, odorless, tasteless medicine." She wrote: "One sip and her small frame literally convulses at the onslaught of Miralax memories." Better to keep this tool handy in your back pocket for later.



Doctors may send your family on a wild goose chase.

When Miralax fails, some doctors conclude constipation wasn't the culprit and start ordering useless, expensive tests — for sleep disorders, psychiatric conditions, nutrient deficiencies, rare digestive diseases, and so on. Kids are put through the ringer for no good reason.

Helpful Reading:

- Don't Assume Your Child Will Outgrow Bedwetting
- Dear Bedwetting Teenagers: Your Condition is 1.) Common, 2.) Not Your Fault, and 3.) Totally Fixable
- Why Some Kids Outgrow Bedwetting and Others Don't

PEG and Enemas: What Studies Reveal

We doctors like to think medicine inexorably advances — that today's treatments improve on what came before. Mostly, they do. But sometimes, our profession drives medicine in reverse.

> **"If a shoddy study supports what people already believe, it's hailed as definitive science, but if a strong study conflicts with a foregone conclusion, it's ignored or nitpicked."**
>
> **— Marty Makary, M.D., author of *Blind Spots***

Some MDs tell parents PEG 3350 works well and enemas are barbaric and outdated. When one mom mentioned enemas at an appointment, the doctor said, "Oh, we don't do that anymore." That part is true — enemas have fallen out of favor in recent decades. But why? Does evidence actually show enemas are traumatic, dangerous or unwarranted? Not at all.

But the literature does reveal pendulum swings in the perception of enemas. According to a 1955 article in the *Journal of the American Medical Association*, the 18th century marked "a particularly low point" whereas "today, the value of a satisfactory enema solution properly used is well nigh universally recognized as a desirable procedure." In the mid-20th century, enemas were generally not considered a big deal, whereas in the 21st century, the pendulum has swung back.

Why the shift? I have no idea, but one mom posted a theory that strikes me as plausible: "I wonder if it's connected to the greater awareness of child sexual abuse and a subconscious connection between that and enemas. Obviously, greater awareness of child sexual abuse is a good thing, but I do wonder if enemas have been tainted by association."

> **"The good thing about science is that it's true whether or not you believe in it."**
>
> **— Astrophysicist Neil deGrasse Tyson, Ph.D.**

For whatever reason, bias against enemas is so deeply entrenched that few recent studies have tested their effectiveness for treating enuresis and encopresis. However, studies published in the 1980s, before PEG 3350 hit the market, offer great insight, and some recent trials provide eye-opening data. Below, I highlight studies to consider if you are a parent or healthcare provider.

The O’Regan Research

Clinical Nephrology, Vol. 23, No. 3 – 1985 (pp. 152–154)

Constipation, bladder instabil[ity, urinary tract]
infection syndrome

S. O'Regan, S. Yazbeck and E. Schick

16 Sean O'Regan Salem Yasbeck Eric Schick
Constipation and the Urinary System

[Relevance of constipation to enuresis, urinary tract infection and reflux. A review](#)
European Urology, 1987

[Constipation, bladder instability, urinary tract infection syndrome](#)
Clinical Nephrology, 1985

[Constipation a commonly unrecognized cause of enuresis](#)
American Journal of Diseases of Children, 1986

Summary: M.O.P. evolved from research conducted by Dr. Sean O’Regan and his colleague Dr. Salam Yazbeck in the 1980s. Their studies tested the regimen Dr. O’Regan had implemented with his son: one month of daily enemas, followed by a month of enemas every other day, followed by a month of enemas twice a week.

For example, in their 1985 study, the duo tracked 47 girls, average age 8, all with recurrent UTIs plus encopresis, daytime wetting, and/or nighttime wetting. After the three-month regimen, UTIs ceased in 44 of the 47 girls, encopresis resolved in 20 of the 21 girls with poop accidents, and enuresis resolved in 22 of the 32 girls with daytime and/or nighttime enuresis.

In 1986, the pair published a study of 22 children — 6 with bedwetting, 2 with daytime-only enuresis, and 9 with both daytime and nighttime enuresis. Anorectal manometry showed all were severely constipated. Among the 17 who agreed to the enema regimen, wetting either ceased or significantly improved within 6 weeks. Nine months later, 14 of the 17 children were dry, and the other 3 reported wetting once a week rather than daily. Among the 5 children who opted against enemas, 4 continued to wet nightly, and one was able to control bedwetting with medication.

My take: I find the 1985 results unsurprising, as encopresis resolves far more quickly than enuresis. I’d bet the girls with persistent enuresis needed more time and/or a more aggressive enema regimen. Dr. O’Regan’s original protocol is pretty tame compared to the regimens I recommend today for challenging cases, such as Multi-M.O.P. and J-M.O.P.

Of particular note:

- Dr. O’Regan described constipation as “incomplete evacuation of the rectum,” an astute observation and a notable departure from the typical conception of constipation as “infrequent pooping.” When I asked Dr. O’Regan, in an interview, why he chose enemas over the oral laxatives of his day (senna and magnesium), he said, “We knew the root cause of bedwetting was incomplete rectal emptying, and enemas were the only way to solve the problem.”
- In his studies, Dr. O’Regan noted that traditional methods of diagnosing constipation, such a patient history and exam, were inadequate and that most parents had no idea their children were constipated. That’s why he used anorectal manometry, a balloon-inflation procedure considered the gold-standard diagnostic tool.
- Dr. O’Regan reported no complications among the hundreds of patients he treated with his enema regimen.

To learn more: “The Curious Case of the Bedwetting 5-Year-Old,” *The M.O.P. Anthology*, pages 75-76.

The Johns Hopkins Study

Habit training as treatment of encopresis secondary to chronic constipation
Journal of Pediatric Gastroenterology and Nutrition, 1985

Summary: A team affiliated with Johns Hopkins medical school conducted a 21-week study on children ages 4 to 16 with severe encopresis. The study aimed to instill a daily pooping habit as a means of resolving encopresis, not specifically to test the value of enemas. However, enemas were the primary treatment. After an initial enema, the children received an additional enema if they went two days without pooping. The treatment succeeded: Among the 43 kids who stuck with the program, poop accidents dropped from 13 per week, on average, to .5. Accidents resolved completely in 60% of the children, and another 23% had occasional underwear poop stains. The 17 kids whose accidents did not completely resolve averaged 16 fewer accidents *per week*.

My take: Compared to the Hopkins researchers, I treat severe encopresis more aggressively. However, the relative success of this study shows that even an inconsistent, but extended, enema regimen can dramatically improve encopresis. The regimen tested was far more effective than what I've seen among children with severe encopresis who take only PEG 3350. My guess is the duration of treatment — five months — played a big role.

Of particular note:

- The researchers described their regimen as "highly effective," "rapid and easy to perform," and involving "minimal risk."
- Like Dr. O'Regan in the same era, the Hopkins authors explicitly rejected the view — common back in the 1980s and still common today — that encopresis is caused by "emotional disturbance."

To learn more: Children with Encopresis and Enuresis Deserve the Best Treatment, But Most Aren't Getting It

The Wake Forest Study

Daily Enema Regimen Is Superior to Traditional Therapies for Nonneurogenic Pediatric Overactive Bladder
Global Pediatric Health, 2016

Summary: Back in 2016, after I found Dr. O'Regan's studies but before I tinkered with his protocol, my clinic conducted a study of 60 patients, ages 4 to 11, with daytime enuresis. Essentially, we compared daily PEG 3350 (along with a pee schedule and, in some cases, overactive-bladder medication) to Dr. O'Regan's original regimen. After three months, 30% of the Miralax patients had stopped daytime wetting, compared to 85% in the enema group.

Daily Enema Regimen Is Superior to Traditional Therapies for Nonneurogenic Pediatric Overactive Bladder

My take: I believe this is the only enuresis study that has compared a daily enema regimen with the traditional PEG 3350 approach. I plan a larger study comparing my current M.O.P. approach with PEG 3350.

Of particular note:

- Our data on rectal diameter reveals why enemas worked better. All the patients began with a rectal diameter over 6 cm, twice a normal measurement. After three months of treatment, the rectums of the Miralax patients remained stretched, to 5 cm on average, not a major improvement. Among the enema group, the average rectum had shrunk to 2.15 cm, a totally normal measurement.
- Our results also explain why three of the enema patients did not improve: Unlike their peers in the enema group, these children did not experience a reduction in rectal diameter. In other words, despite all those enemas, their rectums were still clogged. Today, I would treat these children with M.O.P.x or Multi-M.O.P.
- Most of these children had nighttime enuresis as well, but we only tracked daytime symptoms.

To learn more: New Study: Daily Enemas Resolve Pee Accidents Far Better Than Miralax

The Swedish Study

Fecal disimpaction in children with enuresis and constipation does not make them dry at night
Journal of Pediatric Urology, 2022

Summary: The authors, at Sweden's Uppsala University, treated 23 constipated bedwetting patients, ages 6 to 10, with a combination of enemas and PEG 3350 for two weeks. The children were prescribed daily enemas for three days, followed by an enema every other day for one week. If a child did not have bowel movements for two days, additional enemas were administered. The regimen failed: Enuresis frequency dropped from 9.8 accidents over two weeks to 9.3 accidents. From this, the authors concluded that fecal disimpaction "does not alleviate nocturnal enuresis."

My take: I have included the study here because it's one of the few to treat enuresis with enemas and because it demonstrates a profound misunderstanding of how enuresis and chronic constipation are effectively treated. The study design was so flawed that it ensured treatment failure. Concluding that fecal disimpaction "does not alleviate nocturnal enuresis" is like concluding that two weeks of dieting "does not alleviate obesity." How could it?

Of particular note:

- The authors state that "the value of fecal disimpaction, as a part of constipation therapy, in children with enuresis has not been evaluated." This is true, *for good reason*: Disimpaction is just the first step in the long process of resolving chronic constipation and enuresis.
- The Swedish authors admit their study did not evaluate their subjects for constipation status post-treatment. "We do not know whether the constipation treatment actually worked against the constipation," they note, adding: "Maybe they were still constipated." I would bet on it.

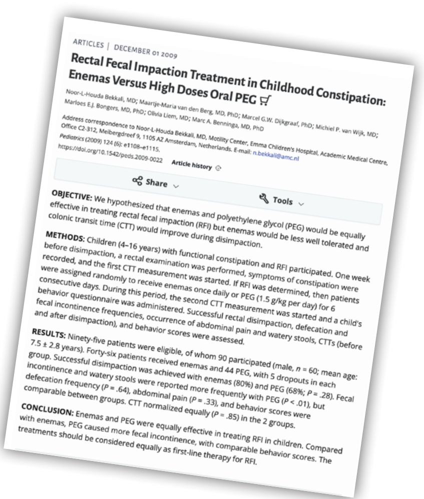
- The authors don't seem to realize it typically takes months for an enlarged rectum to retract to normal size and stop aggravating the bladder. They state enemas administered beyond the initial three days would ensure "the bladder was not disturbed by a distended rectum." But an extra week or two of enemas can ensure no such thing.

- The study began with 66 enuresis patients, but only 23 were classified as constipated, a number I find preposterously low. The authors used two diagnostic methods I consider unreliable: the Rome criteria and ultrasound. In my experience, x-ray and anorectal manometry are far more accurate.

- The authors state that extending enema treatment in children with bedwetting beyond two weeks is "not defensible" unless children also have encopresis or "bothersome bowel complaints." I strongly disagree. Bedwetting alone often crushes kids' self-esteem and severely limits their social life. Just because life could be worse doesn't mean kids don't deserve the most effective treatment possible for the symptoms they do have.

To learn more: Why Most Bedwetting Treatments Don't Work

The Dutch Study



ARTICLES | DECEMBER 01 2009

Rectal Fecal Impaction Treatment in Childhood Constipation: Enemas Versus High Doses Oral PEG

Noor-L-Houda Bekkali, MD; Maartje-Maria van den Berg, MD, PhD; Marcel G.W. Dijkgraaf, PhD; Michiel P. van Wijk, MD; Marloes E.J. Bongers, MD, PhD; Olivia Liem, MD; Marc A. Benninga, MD, PhD

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OBJECTIVE: We hypothesized that enemas and polyethylene glycol (PEG) would be equally effective in treating rectal fecal impaction (RFI) but enemas would be less well tolerated and colonic transit time (CTT) would improve during disimpaction.

METHODS: Children (4–16 years) with functional constipation and RFI participated. One week before disimpaction, a rectal examination was performed, symptoms of constipation were recorded, and the first CTT measurement was started. If RFI was determined, then patients were assigned randomly to receive enemas once daily or PEG (1.5 g/kg per day) for 6 consecutive days. During this period, the second CTT measurement was started and a child's behavior questionnaire was administered. Successful rectal disimpaction, defecation and fecal incontinence frequencies, occurrence of abdominal pain and watery stools, CTTs (before and after disimpaction), and behavior scores were assessed.

RESULTS: Ninety-five patients were eligible, of whom 90 participated (male, $n = 60$; mean age: 7.5 ± 2.8 years). Forty-six patients received enemas and 44 PEG, with 5 dropouts in each group. Successful disimpaction was achieved with enemas (80%) and PEG (68%; $P = .28$). Fecal incontinence and watery stools were reported more frequently with PEG ($P < .01$), but defecation frequency ($P = .64$), abdominal pain ($P = .33$), and behavior scores were comparable between groups. CTT normalized equally ($P = .85$) in the 2 groups.

CONCLUSION: Enemas and PEG were equally effective in treating RFI in children. Compared with enemas, PEG caused more fecal incontinence, with comparable behavior scores. The treatments should be considered equally as first-line therapy for RFI.

Rectal fecal impaction treatment in childhood constipation: enemas versus high doses oral PEG
Pediatrics, 2009

Summary: This study, conducted at a children's hospital in Amsterdam, is among the few to compare PEG 3350 with enemas. The researchers tracked 90 children, ages 4 to 16, who had fecal impaction and encopresis, though the study's goal was to resolve impaction, not encopresis. For 6 days, half the kids received daily enemas at home, while the other half took high doses of PEG 3350. Among the enema group, 80% of the children were deemed to have successful disimpaction, compared to 68% of the PEG 3350 group. One additional day of enemas led to disimpaction in another three kids in the enema group. During the study, the enema group averaged 3.4 accidents, compared to 13.8 accidents for the PEG 3350 group. Watery stools were nearly three times more frequent among the PEG 3350 group than the enema group.

My take: This study reflects today's entrenched anti-enema bias. The authors concluded enemas and PEG 3350 "should be considered equally as first-line therapy," even though the Miralax "caused more fecal incontinence." In my experience, most families would not consider 13 accidents and 3 accidents to be equal! Why not just admit enemas were superior?

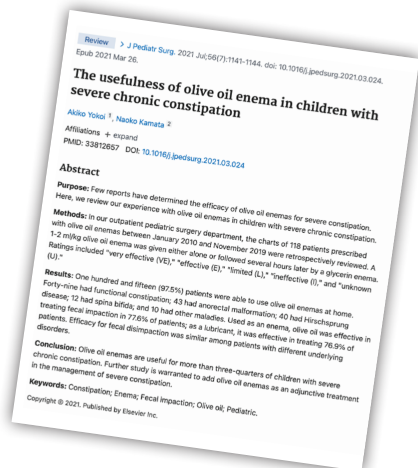
Of particular note:

- The authors reported that both enemas and PEG 3350 successfully increased pooping frequency and colonic transit time, and perhaps that's why they considered the two treatments equally effective. However, in my book, both pooping frequency and transit time are worthless indicators constipation — plenty of severely constipation children poop every day. What matters is whether the rectum is completely evacuated, not how often the child poops or whether *some* stool can exit within 24 hours.

- Prior to the study, the authors had hypothesized that “enemas would be less well tolerated” than PEG 3350, but they guessed wrong, noting they “did not find more fearful behavior in the enema group” and that “enemas should not necessarily be withheld to prevent anxiety.”

To learn more: Yes, Your Child Can Poop Every Day and Still Be Constipated and The “Corn Test” for Constipation is Worthless.

The Japanese Study



Review > J Pediatr Surg. 2021 Jul;56(7):1141-1144. doi: 10.1016/j.jpedsurg.2021.03.024. Epub 2021 Mar 26.

The usefulness of olive oil enema in children with severe chronic constipation

Akiko Yokoi [1], Naoko Kamata [2]

Affiliations + expand

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Abstract

Purpose: Few reports have determined the efficacy of olive oil enemas for severe constipation. Here, we review our experience with olive oil enemas in children with severe chronic constipation.

Methods: In our outpatient pediatric surgery department, the charts of 118 patients prescribed with olive oil enemas between January 2010 and November 2019 were retrospectively reviewed. A 1-2 ml/kg olive oil enema was given either alone or followed several hours later by a glycerin enema. Ratings included "very effective (VE)," "effective (E)," "limited (L)," "ineffective (I)," and "unknown (U)."

Results: One hundred and fifteen (97.5%) patients were able to use olive oil enemas at home. Forty-nine had functional constipation; 43 had anorectal malformation; 40 had Hirschsprung disease; 12 had spina bifida; and 10 had other maladies. Used as an enema, olive oil was effective in treating fecal impaction in 77.6% of patients; as a lubricant, it was effective in treating 76.9% of patients. Efficacy for fecal disimpaction was similar among patients with different underlying disorders.

Conclusion: Olive oil enemas are useful for more than three-quarters of children with severe chronic constipation. Further study is warranted to add olive oil enemas as an adjunctive treatment in the management of severe constipation.

Keywords: Constipation; Enema; Fecal impaction; Olive oil; Pediatric.

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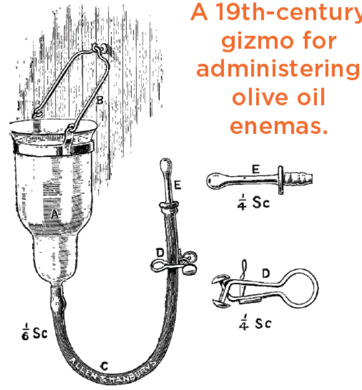
The usefulness of olive oil enema in children with severe chronic constipation

Journal of Pediatric Surgery, 2021

Summary: Like the Dutch study, this one, conducted at a children’s hospital in Kobe, Japan, focused on resolving fecal impaction rather than accidents. However, rather than compare PEG 3350 to enemas, the Japanese authors evaluated the effectiveness of an olive oil enema, either alone or followed by a glycerin enema. After reviewing records of 118 severely constipated children, the authors arrived at two conclusions: 1.) “Olive oil enemas are a safe and effective remedy for chronic constipation,” and 2.) “Olive oil enemas followed by glycerin enemas are useful for fecal disimpaction.” The study included children with “functional constipation” — healthy kids with a garden-variety clogged rectum — as well as children with congenital conditions that make pooping difficult, such as Hirschsprung disease and spina bifida. Among both groups, olive oil enemas were deemed useful in about 77% of cases.



A 19th-century gizmo for administering olive oil enemas.

My take: My clinical experience with overnight olive oil enemas bears out both of this study’s conclusions. In fact, the study, along with my conversations with the lead author, led me to recommend the hospital’s regimen to my own stubbornly clogged patients. I call it **J-M.O.P.**, in deference to the protocol’s Japanese origins.

Olive oil enemas date back at least to the 19th century. An 1892 medical journal called these enemas “a ready and safe method of relieving even the most obstinate cases of spasmodic constipation,” and a 1904 article touted olive oil enemas as “without question most valuable in obstinate cases of constipation.”

Of particular note:

- Unlike American and European physicians, Japanese doctors don’t appear to harbor anti-enema sentiment. The study’s lead author told me that in Japan, enemas are routinely used to treat fecal impaction.
- The study found that over 97% of the children — 115 out of 118 — were able to implement olive oil enemas at home.

To learn more: A Japanese Twist on Bedwetting Treatment: Olive Oil Enemas Plus Liquid Glycerin.

When Miralax Actually Helps

Though I don't consider osmotic laxatives such as PEG 3350 a panacea for enuresis or encopresis, I do find them quite helpful in conjunction with M.O.P.

In fact, the first modification I made to Dr. O'Regan's original protocol, around 2010, was to add a daily osmotic. Today, most M.O.P. variations involve an osmotic at some stage in the process. To clarify: an osmotic laxative is an oral medication — in powder, liquid, gummy, or tablet form — that draws water into the colon to keep stool soft. This is different from a stimulant laxative, such as Ex- Lax, which triggers a bowel movement with 5 to 8 hours if dosed appropriately. Stimulant laxatives can be hugely helpful, especially for kids with a strong tendency to delay pooping, and are included in some M.O.P. regimens. I don't prefer one laxative over another. Folks who prefer to avoid PEG 3350 can use the alternatives I discuss in the *M.O.P. Anthology*. Here are three good uses for osmotics in children with enuresis and/or encopresis.

To soften stool while the child is on M.O.P.

A painful poop is often what sets off the vicious cycle of constipation. Once kids delay pooping, more stool piles up, which makes pooping hurt more, which makes kids delay even more. By softening stool, osmotic laxatives can help break this cycle, giving children the confidence that pooping won't hurt. **For children on M.O.P. with encopresis, I advise against osmotics for the first two weeks.** These kids are so clogged that Miralax tends to make a mess.

> "Only when we added in periodic clean-outs to M.O.P. did we see progress. I think they're helpful, but not as a way to avoid enemas."

To help children poop spontaneously while tapering off enemas and beyond.

By the time a child weans off enemas, the rectum has begun to regain tone and sensation. So, an osmotic laxative — while not directly trigging a bowel movement, the way Ex-Lax does — can help facilitate spontaneous bowel movements. All M.O.P. variations involve an osmotic laxative for at least six months after the child has tapered off enemas and Ex-Lax.

> "Our recent success has followed our first-ever Osmolax clean-out and higher daily doses in addition to 2 daily enemas."

To augment M.O.P. with periodic high-dose "clean-outs."

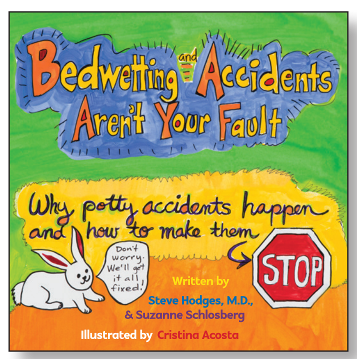
It's foolhardy to assume high-dose "clean outs" actually empty the rectum. But sometimes a weekend spent on the toilet, mimicking pre-colonoscopy prep, can elicit a breakthrough for a child who has plateaued. Whereas a "clean-out" early in treatment often just pushes the poop pile downstream, a Miralax powerwash later in the game may help finish the job.

Helping Your Child Get On Board

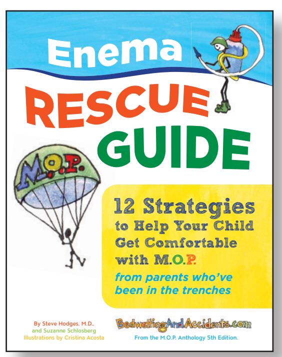
Many parents assume their child will reject enemas, and doctors tend to reinforce this notion. So, it often comes as a surprise to parents when their child is receptive. These kids have already been through the ringer and tend to welcome a treatment that works. Many children as young as 6 can insert the enema themselves, a scenario that gives them control and privacy. Despite what many doctors say, parents needn't perceive enemas as something terrible they are "doing to" their child. As one mom posted, "Given the choice, our daughter chooses her 'bum medicine.'" Another wrote that her son is "grateful" for enemas. "Enemas can give a child back control of their lives. That is the opposite of trauma."

It's critical that children have buy-in prior to starting M.O.P. Obviously, parents should not force enema treatment on their child. Our Enema Rescue Guide, included in the *M.O.P. Anthology*, is packed with strategies from parents who successfully introduced enemas to their fearful or hesitant children.

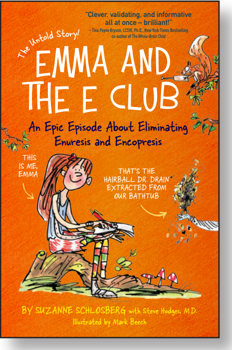
In addition, three of our children's books — one for every age range — give many kids the confidence to try enemas. At least that's what parents tell us!



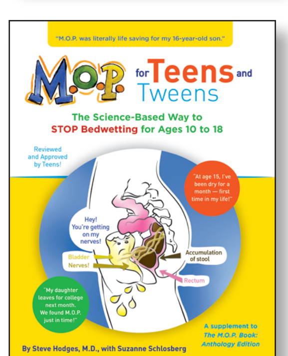
For ages 5 to 10, featuring goofy Dr. Pooper and twins who have enuresis and encopresis.



Practical and creative kid-tested strategies.



A novel for ages 7 through 12, starring 11-year-old Emma, an extrovert with enuresis and encopresis.



A Cliffs Notes version of the Anthology, with advice from teens on M.O.P.

If Your Doctor or Spouse Oppose Enemas

In *Blind Spots*, Dr. Makary writes, “Changing the warpath of the medical establishment would be like turning around an aircraft carrier that had been stuck in the mud.” Of course, your goal isn’t to transform the entire medical establishment; you’re just trying to gain the support of your doctor.

On occasion, this is easy; usually, it’s not. Many healthcare providers are 100% convinced that Miralax is terrific and enemas are traumatic. I know it’s tough to disagree with your doctor. Studies show that even confident, assertive people become tongue-tied when faced with the prospect of challenging their physician’s opinion. Many fear being labeled a “difficult patient” and don’t want to rock the boat. I get it. If you show up at your appointment armed with studies and printouts, you may worry your doctor will think: *Hey, I went to medical school; you didn’t.*

What if you and your doctor — or spouse — clash over enemas? Try these strategies.

What’s a parent to do? Here’s what I suggest:

- **Describe the toll accidents are taking on your family.** Doctors who push PEG 3350 even when it has failed may not recognize the extent of your family’s distress. Try: “This is difficult for our family. We’re all at the point where we’re willing to try something new.”
- **Ask questions.** Try: “Do you have experience with a regimen such as M.O.P.? Could you point me to studies that show enemas harm kids or that Miralax is more effective?”
- **Hand your doctor The Physician’s Guide to M.O.P.** This packet, found in the *M.O.P. Anthology*, includes a “Dear colleagues” letter from me explaining why I recommend enemas over PEG 3350. I realize a letter from me is unlikely to persuade a doctor who’s staunchly anti-enema, but you never know. Some parents have had success. Also, you can have your doctor contact me directly. I’m always happy to speak with colleagues.

- **Take the "humor me" approach.** Say something like: "Well, how about if I try this for a month and then check in with you? If it doesn't work, we'll try something else."

What if you still get nowhere? Find another physician or go it alone. M.O.P. doesn't require prescription medication or medical supervision. You can implement the regimen on your own, with nothing more than a pack of syringes and a bottle of glycerin. Families do it all the time.

What if you're on board with enemas but your spouse isn't? One mom posted: "My husband is a scientist with a Ph.D., and he is skeptical because M.O.P. is different from mainstream medical recommendations. He has really drawn a hard line on this, and it's caused conflict between us. Our GP does not recommend M.O.P., and our pediatrician told us she believes that enemas are traumatic. Any advice?" I think this question is best answered by parents who've been there. Here's how members of our support group have responded to questions about spousal disagreement over M.O.P.

- "I finally had to ask my husband to trust me, and he has backed off and even started helping. It took months of discussion, lots of patience, and finally a few dry nights to get us here."
- "I made my husband start doing the Miralax and getting up to change the sheets. He experienced how much of a pain it is and got on board with M.O.P. real quick."
- "My husband didn't get on board until he saw the x-ray. It showed our son's rectum was basically flattening his bladder. Plus, reading the study about how enemas work better than Miralax appealed to his rational side."
- "Within 5 days of an oral clean-out, my daughter started having accidents again. So, my husband no longer felt justified in refusing to do M.O.P."
- My husband was not completely on board when we started. I felt really uncertain as well. We decided to do one trial day. It went surprisingly okay, and our daughter ended up having her first dry pull-up in ages, so she was eager to try again. We decided to commit to 30 days and saw such improvement that now my daughter begs to do the LGS, and my husband is completely on board."

"Much of what the public is told about health is medical dogma — an idea or practice given incontrovertible authority because someone decreed it to be true based on a gut feeling."

— Dr. Marty Makary

"All it took was my husband seeing progress. He was sick of cleaning out her car seat! As her accidents have improved, he has been more on board because he can see M.O.P. is working."

"What turned my husband around was an x-ray. He had blamed the bedwetting on behavior issues and on my 'failure' to properly potty train. Once he saw the x-ray, he couldn't argue. He could see this was a medical issue and that our doctor, who kept telling us 'Don't worry, he'll outgrow it,' was uninformed. He even admitted to me, 'I think you might know more about this than the doctor does.'"