

## Bitter-Sweet Pill to Swallow: Helping Children Swallow Pills

By Glenn Rodrigues, pharmacist & Christine Chambers, psychologist



"Your son has ulcerative colitis" the gastroenterologist said. I wasn't surprised. The 5 trips to the hospital over the past 2 months for different diagnostic tests all indicated we were heading to this statement.

My wife was overwhelmed because this was all so new. I'm a pharmacist. I deal with inflammatory bowel disease all the time. I had already moved on past what is the disease, what will it mean for my son's life, what's the best case and worst case scenarios. Although, It's still surprising for a 7 year old. My thoughts were next steps.

His colitis affected the entire large colon so rectal therapy wasn't an option. Is that bad or good? It meant he has to take oral medication. Enteric coated oral medication to minimize the side effects and to work properly. Enteric coated, sometimes very large tablets, two to four times a day oral medication. He's never swallowed a pill in his life. Liquid Advil®. Liquid Biaxin®. Liquid Zithromax®. We didn't even bother with chewable tablets. A researcher gave us this "sippy cup" like thing with a wide-opening mouth piece. It had a grill to stop the pill from falling into the liquid within the cup. Toss it back in one fell swoop, like chugging a beer. Could it work? I'm having my doubts.

I can imagine forcing him to take the pill. "Did you swallow it?" No, it's still on his tongue. "Try again." "Try!" "Yes you can. It's important. It's going to help your belly." Like reason will make it easier. It's dissolving in his mouth. He has to try now or we'll waste the dose. Who were those parents that said "Hold them down until they swallow it?" Two to four times a day. Wait a minute that means the babysitter will have to do this too. New perspective on non-compliance. What do all those parents of children taking coated ADHD meds do? I'm their pharmacist. Why don't I know?

Then we met Dr. Christine Chambers. Dr. Chambers is a pediatric psychologist at the IWK. She was going to teach my son how to swallow tablets. I introduce myself as a pharmacist. I learn that the Pediatric Health Psychology program at the IWK has been helping children learn to swallow pills for over 20 years.

The psychological intervention is based on principles of behaviour therapy, primarily "shaping", in which successive approximations to the desired behaviour are rewarded. Children are initially taught to swallow very small cake decorations (e.g., chocolate sprinkles) and once this task is mastered, the child is offered larger and larger candies, and then placebo tablets and capsules of varying sizes. Children are provided with praise and reinforcement (e.g., a sticker) for mastery of each step. Treatment can also include behavioural modeling, with the therapist demonstrating and the child trying in a game-like manner, and relaxation strategies (e.g., deep breathing).

So Dr. Chambers takes out her tray of candies of all different sizes. There's enough pressure on the child to do this, it's time for mom and dad to leave. Twenty-five minutes later we are called back in. He swallows a candy the size of an Ativan SL. Then one the size of hydrochlorothiazide. Then metformin 500 mg. Then a candy the size of Salofalk, Asacol or sulfasalazine. He's so proud, he's beaming. He's all smiles. So am I. Good boy!

The first studies examining the effectiveness of behavioural treatments for pill swallowing were published in the early 1980's. Success rates are in the range of 75-90% with excellent maintenance at 3 months and longer. While some children are able to master pill swallowing in one session, this is not the case for all children. Children with behavioural or developmental difficulties often require up to 10 sessions. And not all children are able to learn to swallow pills.

Now when I'm in the pharmacy if I encounter a child that needs to swallow a coated tablet, I ask "Can your child swallow pills? There's a service at the IWK available." All you need is for your doctor to send a referral to the Pediatric Health Psychology Program at the IWK. Referrals can be faxed to: (902) 470-8736. Of note, there is often a wait list and priority is given to children with medical conditions for whom there is no medication alternative but pills.

Every pharmacist should know about this.

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