

## Research in Practice

Department Editor  
Marilee Schmelzer, PhD, RN

### The Need for a National Study of Colon Cleansing Procedures

I want to challenge the members of the Society of Gastroenterology Nurses and Associates (SGNA) to conduct a national research study about cleansing procedures before colonoscopy. As a researcher, I see potential research projects everywhere, and a recent experience made me think there is a need for a national gastroenterology nursing study. This is what occurred.

I am not an endoscopy nurse but have been a member of SGNA since the early 1990s, have read numerous research articles testing colon preparations, and have heard many endoscopy nurses say the bowel cleansing preparation is the worst part of colonoscopy. Naturally, I was a bit nervous about preparing for a recent colonoscopy. To my surprise and delight, it was remarkably easy to do.

My preparation consisted of a clear liquid diet the day before the procedure, 45 mL of an oral sodium phosphate solution the night before the procedure, and a second 45-mL dose the morning of the colonoscopy. The instructions included:

- An explanation of what constituted a clear liquid diet and instructions to avoid red and purple liquids;
- The name and a picture of the sodium phosphate solution and places to buy it;
- Exact details about how to take the solution;
- How long it would take to experience the effects; and
- How long the effects would last.

A registered nurse also called to ensure I understood the instructions and had purchased the solution. She recommended I take the 45 mL of undiluted solution straight and chase it with two large glasses of water, explaining that diluting it in water would just give me more "nasty-tasting stuff" to drink. Although her advice varied from the written directions, it made sense to me because I knew everything would mix together in the stomach.

Because I knew how long it took for the sodium phosphate to take effect and how long it lasted, I was able to adjust the dosage time so the effects of the evening dose were finished before I went to bed and the morning dose's effects had ended before I left home for the gastrointestinal (GI) laboratory. The only discomfort was a profound sense of revulsion (not really nausea) when I poured my morning dose. I was amazed because I took the evening dose easily. That morning, my brain said "swallow it" and my body said "no way." I compromised with myself and swallowed most of it; I just couldn't get that last 15 mL down and reasoned it was probably okay because I was healthy and physically active. Fortunately, my final returns were clear yellow, which I later learned was

GASTROENTEROLOGY  
NURSING  
Copyright 2005  
by Society of  
Gastroenterology Nurses  
and Associates, Inc.

the criterion for a good preparation. My experience shows even those of us who know better don't always do what we're told!

I must admit cleansing the colon was the hardest part of the colonoscopy but only because it is the only part of the colonoscopy I remember (thanks to midazolam [Versed]). My experience made me wonder if we already might have an excellent colonic cleansing procedure, at least for healthy people, or was it just a coincidence that it worked so well for me? As a researcher, I know the dangers of assuming what works for me works for everyone.

While looking at the literature, I found a recent article by Allaire, Thompson, Cash, and Galt (2004) reporting the results of a quality improvement project comparing two regimens (phospho-soda versus bisacodyl/polyethylene glycol) for colonoscopy preparation. The authors described a regimen similar to the one I followed, and they found better efficacy, patient compliance, and cost with the phospho-soda preparation.

Polyethylene glycol (PEG) preparations are recommended for patients at risk for electrolyte imbalance from phospho-soda, especially those with liver, kidney, and heart failure. Greenwald (2003) developed a regimen for improving the results when PEG solutions are given to inpatients.

There are many different cleansing regimens being used, and it seems the choice is more often based on tradition and the physician's preference than scientific evidence. I propose

we plan a national research project to study the situation. Participating hospitals would have clear, detailed regimens, such as those described in Allaire et al. (2004) and Greenwald (2003). The nurses and physicians would have clear guidelines and instruments for making precise measurements of such variables as cleansing effectiveness and patient compliance. Subjects would be carefully selected according to clear criteria. If we follow the same protocols and make the same precise measurements, we can compare the results. This would provide large amounts of data to enable us to make predictions about the effectiveness of colon cleansing preparation in specific patient situations. We, the membership of SGNA, have the expertise, the opportunity, the contacts, and the organization to perform a national research project. I challenge you to "go for it." E-mail your thoughts to me at schmelze@uta.edu.

#### References

- Allaire, J., Thompson, W. O., Cash, B. D., & Galt, D. J. B. (2004). A quality improvement project comparing two regimens of medication for colonoscopy preparation. *Gastroenterology Nursing, 27*(1), 3-8.
- Greenwald, B. (2003). Inpatient bowel preparation order set: A means to enhance patient completion of bowel preparation medication. *Gastroenterology Nursing, 26*(6), 238-241.