



Our Practice



By pharmacists for pharmacists.

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Welcome to *Our Practice*, a new, bi-monthly e-newsletter created as a resource for the practicing pharmacist community. In each issue we bring you cases, tools and other information that we have found helpful in our day-to-day role as patient care providers. Each case in *Our Practice* has been peer reviewed and qualifies as a non-accredited CE learning activity within the annual PDAP requirement for licensure by the College of Pharmacists of BC. If you have any questions or feedback feel free to contact us at pharmacists.clinic@ubc.ca. Also, feel free to share this e-newsletter with your colleagues.

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Feature Article

Finding patients in need, of a pharmacist – indeed!

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A telephone survey of Saskatchewan residents found that despite having a favourable view of pharmacists, the majority of respondents (65%) felt like “customers” rather than “patients” when visiting a pharmacy.¹ Because of preconceived notions of pharmacist’s roles, patients may not ask for help or make their needs apparent to a pharmacist. Similarly, pharmacists may not realize a patient standing right in front of them needs their help.

When the UBC Pharmacists Clinic (the Clinic) opened in 2013, we faced the same challenge of people not understanding why they would need or want to talk with a pharmacist. We had to be really clear on the value we (and all pharmacists) offer and tell

patients in a way that met their needs. Clinical creativity was also required to identify patient care opportunities.

We reflected on what we consistently heard from patients; they want to feel cared for, understood, included in decision-making, have advocates and collaboration amongst their healthcare team. They want answers and understanding, follow-up and positive results (as defined by them) and they generally want to be on less medication. These patient needs became the basis for key messages about what we offer and can be found on our brochure and website.

We also asked patients questions about unmet needs that we could then address. Questions like: Are you satisfied with the results you are getting from your treatment? Do you understand what you are taking and why? What would you like to know about your medications? We talked to caregivers, family members, spouses, adult children etc., and told them how we could help ease challenges they face.

We identified the characteristics of patients we knew we could help (e.g. elderly, polypharmacy, recent hospital discharge etc.) and started having similar conversations with them. We have also spent significant time building relationships with local family

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physicians. We ask about their concerns with patients and drug therapy, and explain how we can respectfully collaborate. We describe how we as pharmacists look at patients and medications in a way that complements the physician perspective. Be prepared, as most physicians will bring up patients in their practice who are highly complex and top-of-mind. These are the patients they ask for help with initially, not the easy cases.

Other strategies we continue to use with success:

Giving presentations for local patient advocacy groups for medication heavy conditions. Audience members tend to fall into one of two groups: sophisticated patients who are hungry for new knowledge, or newly diagnosed patients trying to understand the basics. This is a great experience for pharmacy students on rotation.

Intake forms for all new patients (*more about that in our next issue!*). We include brief screening questions to identify patients at high risk for drug related problems.

Our medical office assistant (and your pharmacy technicians or assistants) is often the first point of patient contact so we prepared key messages to share with patients to explain what to expect from a pharmacist consultation.

“Roster” or systematically identify and invite patients with a target disease or medication to book a consultation. Perhaps Health Canada has released a medication advisory or a practice changing guideline has been published. We identify patients impacted and offer to book consultations with the explanation that we have new information that may impact their treatment.

See the same patients ... again, and again. Complex patients require on-going care to work through problems in priority sequence. Often patients see medication reviews as a one-time service. Set the expectation for routine follow-up early on and explain to them that optimizing drug therapy and improving their health can only occur with careful monitoring over the long-term.

Patients we care for often remark how much they appreciate having access to a pharmacist's unique knowledge and perspective. Although the thought of doing more within the workday may be overwhelming, we started small, and have grown from there. As once (allegedly) said by Mark Twain, “The secret to getting ahead is getting started.”

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Case Study

Magnesium for Migraine Prophylaxis.

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A 54-year-old male presents to clinic. He reports a 10-year history of episodic migraines without aura, starting after a motor vehicle accident. Migraines occur multiple times per week and are debilitating. He takes escitalopram for depression and modafinil for chronic fatigue. As-needed medications include diclofenac and tramadol/acetaminophen for migraine and neck pain, and medical marijuana for insomnia. He rarely uses PRNs due to general reluctance to take medications. Although he is a candidate for migraine prophylaxis, he has a strong preference to avoid additional prescription medications.

In the Global Burden of Disease Survey 2010, migraine ranks in the top 10 for both prevalence and disability.^{1,2} In patients whose quality of life is significantly impacted by migraines and their associated symptoms, prophylactic therapy is warranted.^{1,3} Many patients turn to natural health products to manage migraines due to concern over side effects of commonly used prescrip-

tion medications. Interestingly, the Canadian Headache Society assigns a strong recommendation to magnesium for migraine prophylaxis.⁴ The rationale for magnesium in headache prevention is multifactorial with deficiency hypothesized to play a role in promoting cortical spreading depression and altering the release of neurotransmitters involved in migraine pathophysiology.⁵

Four double-blind, randomized, placebo-controlled trials have been conducted on oral magnesium for migraine prevention^{6,7,8,9}; 3 have demonstrated a statistically significant benefit.^{6,7,9} A recent systematic review of these trials concluded that differences in results are likely due to varying study methodology including different magnesium doses and formulations.¹⁰ Studies are briefly summarized in **Table 1**. Magnesium was generally well tolerated in all studies with a predictable increased risk of diarrhea.

Considering the best available evidence and patient preference,

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Table 1: Double-blind, randomized, placebo controlled trials for oral magnesium

Authors/ Sample size	Intervention (elemental Mg dose)	Typical patient	Primary migraines outcome(s)	Result Mg vs. placebo
Facchinetti⁶ N=35 (15 subjects with no history of migraine, acted as controls)	magnesium pyrrolidone carboxylic acid 360mg daily	-Female -Age 30 -menstrual migraine	-Duration -Intensity (Pain total index score) at 8 weeks	SS decrease in pain total index scores
Peikert⁷ N=81 Mg: n=43 Placebo: n=38	trimagnesium dicitrate 300 mg BID	-Female -Age 40 -Migraine ±aura -Mean attack frequency 3.6/month	-Frequency -Intensity -Duration at 12 weeks	0.93 fewer attacks per month ARR 26.1% NNT=4 (SS) Duration reduced by 0.21 days (SS)
Pfaffenrath⁹ N=69 Mg: n=35 Placebo: n=34	magnesium-L-aspartate-hydrochloride-trihydrate 121.5 mg BID	-Female -Age 40, -Migraine without aura	50% reduction in migraine duration or intensity at 12 weeks	28.6 vs 29.4% met primary outcome (not SS)
Köseoglu⁹ N=40 Mg: n=30 Placebo: n=10	Magnesium citrate 300 mg BID	-Female -Age 35 -Migraine without aura -Mean attack frequency 3.5/month	-Frequency -Severity at 12 weeks	0.5 fewer attacks per month ARR 19% NNT=7 (SS) Pain reduced by 3.57 points on visual analogue scale (range 0-10) ARR: 52.8% NNT: 2 (SS)

Mg = magnesium SS = statistically significant NS = not statistically significant

a trial of elemental magnesium 300 mg BID (as citrate) was recommended. This aligns with the Canadian Headache Society guidelines and is derived from 2 positive studies using this dose and formulation. The patient was instructed to start with the lowest available capsule size and titrate every few days as tolerated. After 3 months the patient will be evaluated for a 50% reduction in migraine frequency and/or severity with magnesium discontinued if this is not achieved.

Magnesium is a readily available, affordable and well tolerated alternative for migraine prophylaxis with some evidence for reducing migraine frequency and severity. Magnesium may be a viable consideration in patients unwilling or unable to trial typical first line pharmacologic agents.

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Note - This case study has been peer reviewed and qualifies as a non-accredited CE learning activity within the annual professional development requirement for licensure by the College of Pharmacists of BC.

PHOTOS: IVAN YASTREBOV

Your Responsibility

Health care professionals are required to assess each case based on the patient's unique circumstances in consultation with the patient and their care team. The recommendations in this case are based on the views of our clinicians after careful consideration of the best available evidence and needs of the patient. If you would like to discuss one of your patients with us please contact the Clinic team.