Chiropractors and pharmacists in a family health team: Unlikely allies in the collaborative management of pregnancy-related low back pain

John J. Riva, BA, DC; Iris E. Krawchenko, RPh, BScPhm, CGP; Jessica M.S. Lam, BScPhm; Fiona E. O'Sullivan, BSc, MD, CCFP; Elizabeth C. Stanford, BSc

Introduction

Although chiropractors often practise independently, there is evidence that a growing number are being integrated into multidisciplinary care environments.[1,2] Co-management, openness to discussion and patient interest have been found to be key factors for developing a chiropractor's involvement within a collaborative care setting.[3]

With the introduction of Bill 179 in Ontario, pharmacists will potentially be able to extend their scope of practice to improve their focus on clinical care activities. The Ontario Government is investing in collaborative care as a means of optimizing access to a wide range of health professionals to make best use of limited resources in the delivery of primary and specialty health care.[4] In an effort to ensure that chiropractors in Ontario are practising to their full potential, a scope of practice review has been recommended by the chiropractic profession.[5]

This case report provides an example of the overlap of scopes of practice between pharmacists and chiropractors, emerging as a new common ally group in patient care. Both the pharmacist and chiropractor have been co-located within a family health team (FHT) environment for more than 5 years.

Case history

A 25-year-old female was referred by her family physician to a chiropractor for nonpharmacological treatment options regarding pregnancy-related low back pain (PLBP). The patient had a history of knee joint pain, flat feet, asthma, iron deficiency and gastroesophageal reflux disease. At the time of presentation, the medication regimen included:

- Pulmicort Turbuhaler 200 mcg, one puff twice a day
- Bricanyl Turbuhaler 0.5 mg, one puff every 6 hours, as needed
- Ferrous fumarate 300 mg, one capsule daily
- Diclectin 2 tablets at bedtime, 1 tablet in the morning and 1 tablet at noon
- Acetaminophen 325 mg, 1–2 tablets every 6 hours for pain, as needed

The patient was self-medicating with the acetaminophen 325 mg for PLBP, with minimal benefit.

The patient presented with progressively worsening neck, middle and low back pain. These symptoms were limiting her ability to work. The chiropractor initiated care that included spinal manipulation, education on posture, muscle techniques and pacing strategies and pregnancy-specific exercises.

The chiropractor offered the patient samples of an over-the-counter (OTC) natural health product (Biofreeze) to use as a pain control adjunct. The chiropractor suggested that the patient confirm with the co-located community pharmacist that the product was appropriate both during pregnancy and with her current medication list. Biofreeze is a unique cold therapy gel formulated primarily with menthol to provide local pain relief.[6,7] The pharmacist reviewed the active ingredients in the suggested natural health product and determined that Biofreeze was not recommended during pregnancy.

Pregnancy-related low back pain

PLBP is common, leads to loss of work, interferes with normal daily life and tends to increase as pregnancy advances.[8] Approximately 1 in 3 pregnant women will experience PLBP.[9] Symptoms typically begin during the 18th week of pregnancy and peak in intensity between the 24th and 36th weeks.[10]

A recent systematic review including 6 preliminary studies found chiropractic care to be beneficial for the treatment of PLBP.[11] As well, a systematic review of 8 randomized controlled trials found that physical therapy interventions commonly administered by chiropractors, such as pregnancy-related exercise and acupuncture, reduced pain intensity and back-pain related sick leave.[12] Despite these findings, health care providers often lack knowledge on PLBP management strategies and fear harm to the fetus by recommending treatment.[13]

Pregnancy risk categories for medications

One of the most important considerations during pregnancy is the potential for risk with medication use. To address medication risk, the United States Food and Drug Administration (FDA)-assigned pregnancy categories are typically used by pharmacists and medical physicians in clinical situations. The purpose of the FDA categories is to facilitate drug choice prior to fetal exposure, rather than provide information on how to manage the pregnancy.

The FDA-assigned pregnancy categories were initially deemed to facilitate ease of use, however, it has been noted that these categories oversimplify the complexity of weighing the risks to the fetus against the benefits of adequate management of maternal medical conditions.[14,15] It has been reported that the most important and relevant data should be derived from human studies to provide a higher degree of rigour of safety information in human pregnancy.[16]

In response to these concerns, the FDA made an announcement in May 2008, stating that they will replace the A, B, C, D and X classification system with a model consisting of 3 sections.[17,18] As part of this new classification system, a therapeutic alternative section will be included to summarize the evidence discussed. This is in keeping with scope of practice changes favouring an interprofessional approach.

Knowledge into practice

- Pharmacists could benefit from practical knowledge on the nonpharmacological approaches to pain management.
- Chiropractors recommending natural health products should consider using a pharmacist in complex drug profile cases.
- Co-location facilitates mutual respect and sustainable collaborative practice.
- It is important for pharmacists to communicate with other health professionals about programs, such as MedsCheck, that are available for patients.

Co-management approaches

The following summarizes the perspectives taken by the various health care providers in this case report. Each provider focused on his or her area of expertise to address the patient's needs during her pregnancy. In settings such as this with co-located providers, team-building skills are necessary for establishing good working relationships.

Family physician

The patient presented in the 18th week of gestation with worsening low back pain as well as new thoracic spine and right hip pain. It was described as getting "really bad." She could not get comfortable at night due to the pain. Recently, minor painful symptoms had also started at the left medial knee and symphysis pubis. She had a long-standing foot diagnosis of structural pes planus (flat feet).

To address this worsening presentation of PLBP, the patient was referred to the co-located chiropractor. The patient was also advised to be fitted for custom orthotics, in order to help with the pes planus.

Chiropractor

The goal of chiropractic care in this patient was to offer management of PLBP to allow the patient to continue working up to delivery. As pregnancy progresses, there is a combination of biomechanical changes and a ten-fold relaxin hormone increase affecting the ability of the back and pelvis to function properly during weight-bearing activities.[19]

Care was initiated to address both pain and instability in joints of the back and pelvis. As with medications, there are obstacles to physical care during pregnancy. Most physical maneuvers need to progressively change from prone to side lying as pregnancy progresses, making care more problematic. As well, contraindications exist with common nonpharmacological pain control modality devices such a transelectrical nerve stimulation

La connaissance en pratique

• Il pourrait être utile pour les pharmaciens d'acquérir des connaissances pratiques sur les méthodes non pharmacologiques de soulagement de la douleur.
• Les chiropraticiens qui recommandent des produits de santé naturels doivent envisager de recourir aux services d'un pharmacien pour les profils pharmaceutiques complexes.
• Le partage de locaux favorise le respect mutuel ainsi qu'une pratique de collaboration durable.
• Il est important que les pharmaciens communiquent avec les autres professionnels de la santé au sujet des programmes comme MedsCheck qui sont offerts aux patients.

and electrical muscular stimulation.

A recent randomized controlled trial of Biofreeze combined with spinal manipulation in 36 subjects showed significant reduction in low back pain.[20] As such, the patient was offered some samples of Biofreeze gel and told to discuss the appropriateness of its use during pregnancy with the co-located pharmacist.

Community pharmacist
When making any pharmacotherapy recommendations to women who are pregnant, a thorough assessment of the drug's safety for the fetus and mother is necessary. Once this patient identified that she was pregnant, an assessment was done to determine the clinical safety data of Biofreeze. The active ingredients in Biofreeze gel are menthol 3.5% and camphor 0.2%. According to the FDA Pregnancy Categories, both menthol and camphor are rated in the Pregnancy Risk Factor C Category. Medications in this risk category should be used only if the potential benefits justify the potential risk to the fetus.

The chiropractor was informed of this and concurred that the product, as pain control adjunct, should not be used. The potential for gains in this instance was minimal, since current chiropractic care was already offering a moderate degree of improvement and the patient was able to work. The patient was informed and did not use the Biofreeze gel.

Implications for clinical practice

As a follow-up to this case, the Ontario MedsCheck Program[21] was described to the chiropractor as a possible method to enhance patient medication safety for future cases. Ontario's MedsCheck program was launched on April 1, 2007. It is intended for use with patients having a chronic condition and taking 3 or more prescription medications. A MedsCheck appointment is a one-on-one consultation with a pharmacist for approximately 30 minutes once per year. It assists patients in better understanding how their medications work and may interact with each other and with OTC medications they may be taking, potentially improving their adherence and identifying any drug-related problems.

The MedsCheck program provides a formalized framework where chiropractors can refer patients to pharmacists to address these issues. Patients often use OTC products or natural health products to self-treat chronic pain.[22] Patients may also ask their chiropractors questions about other nonprescription treatment modalities. In the context of this case, a MedsCheck appointment could enhance patient and provider pregnancy care decisions in conjunction with an existing public service such as Motherisk.[23]

Conversely, during patient interactions and MedsCheck appointments, pharmacists may identify patients who could benefit from or would prefer nonpharmacological treatment modalities for pain and make a referral to a chiropractor. Examples of this are:

• During pregnancy or other clinical situations limiting drug use
• When adverse drug reactions have occurred
• Being at maximum doses of pain medication
• For patients who prefer a nonpharmacological approach

The MedsCheck document follows the patient to the chiropractor so they can then review the pharmacology being used for pain management.

In this case report, access to the patient's electronic medical record (EMR) was provided to the co-located pharmacist and chiropractor. With patient consent and appropriate records release, the pharmacist and chiropractor documents were added to the patient's medical record. Using the common EMR allows all health care providers involved in patient care to communicate on a common platform. This helps to reduce system-based errors. It also offers opportunities to identify both additive solutions and care limitations by reviewing multiple previous case progressions.[24]

Conclusion

Chiropractors using natural health products in their practice could benefit from education on a pharmacist's core competencies. Likewise, as pharmacists' scope of practice increases to allow further direct patient care decisions, they could benefit from clinical education on nonpharmacological approaches to pain management.

Limitations of our conclusions include the rigour of a case report and applicability to other collaborative environments. There were also strengths to our conclusions. Pharmacists and chiropractors have been collaborating in this family health team practice setting for more than 5 years.

This indicates that this collaboration is sustainable over time.

Using the example of a pharmacist and chiropractor, who have both held very separate areas of practice, in part due to their perceived scopes of practice, offers some insight on the value of team-building skills on collaboration when translated to other professions whose scope of practice overlap to a greater degree. ■

From the Department of Family Medicine (Riva) and the Michael G. DeGroote School of Medicine (Stanford), McMaster University; Dell Pharmacy (Krawchenko) and the Hamilton Family Health Team (O'Sullivan), Hamilton; and the Toronto Western Hospital (Lam), Toronto, Ontario. Contact rivaj@mcmaster.ca.

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