

# Letters to the Editor

## OnabotulinumtoxinA Injections for Chronic Migraine Prophylaxis

**Original Article:** Migraine Headache Prophylaxis

**Issue Date:** January 1, 2019

**See additional reader comments at:** <https://www.aafp.org/afp/2019/0101/p17.html>

**To the Editor:** We appreciated this article on migraine headache prophylaxis from Drs. Ha and Gonzalez. Because of the prevalence of migraine headaches, we would like to elaborate on the role of onabotulinumtoxinA (Botox) injections for chronic migraines. This is an office-based procedure that can be performed by family physicians and can provide great relief to patients. Largely because of cost, it should be reserved for patients who have chronic migraines (not episodic migraines or tension-type headaches) and who have had no success with daily prophylactic therapies.

According to the American Academy of Neurology, onabotulinumtoxinA should be offered to patients with chronic migraines, with the goal of increasing the number of headache-free days and reducing impact on health-related quality of life.<sup>1</sup> These recommendations are based on two randomized trials that showed a statistically significant decrease in the frequency of headache days.<sup>2,3</sup> Since then, other studies have demonstrated its tolerability, safety, and effectiveness in the treatment of chronic migraines.<sup>4,5</sup> One study also demonstrated the cost-effectiveness of the injections through a reduction in urgent care/emergency department visits and hospitalizations.<sup>6</sup>

The onabotulinumtoxinA injection procedure comprises superficial injections into 31 mapped sites. They are generally well-tolerated, and patients can return to normal activity the same day. The most common adverse effects reported are neck pain, muscle weakness, eyelid ptosis,

and injection-site pain. This treatment is a relatively easy in-office primary care procedure that can provide significant pain relief to patients with chronic migraine headaches.

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## References

1. Simpson DM, Hallett M, Ashman EJ, et al. Practice guideline update summary: botulinum neurotoxin for the treatment of blepharospasm, cervical dystonia, adult spasticity, and headache: Report of the Guideline Development Subcommittee of the American Academy of Neurology. *Neurology*. 2016;86(19):1818-1826.
2. Aurora SK, Dodick DW, Turkel CC, et al.; PREEMPT 1 Chronic Migraine Study Group. OnabotulinumtoxinA for treatment of chronic migraine: results from the double-blind, randomized, placebo-controlled phase of the PREEMPT 1 trial. *Cephalalgia*. 2010;30(7):793-803.
3. Diener HC, Dodick DW, Aurora SK, et al.; PREEMPT 2 Chronic Migraine Study Group. OnabotulinumtoxinA for treatment of chronic migraine: results from the double-blind, randomized, placebo-controlled phase of the PREEMPT 2 trial. *Cephalalgia*. 2010;30(7):804-814.
4. Frampton JE, Silberstein S. OnabotulinumtoxinA: a review in the prevention of chronic migraine. *Drugs*. 2018;78(5):589-600.
5. Escher CM, Paracka L, Dressler D, et al. Botulinum toxin in the management of chronic migraine: clinical evidence and experience. *Ther Adv Neurol Disord*. 2017;10(2):127-135.
6. Rothrock JF, Bloudek LM, Houle TT, et al. Real-world economic impact of onabotulinumtoxinA in patients with chronic migraine. *Headache*. 2014;54(10):1565-1573.

**This letter** was sent to the authors of "Migraine Headache Prophylaxis," who declined to reply.

**Send letters** to [afplet@aafp.org](mailto:afplet@aafp.org), or 11400 Tomahawk Creek Pkwy., Leawood, KS 66211-2680. Include your complete address, email address, and telephone number. Letters should be fewer than 400 words and limited to six references, one table or figure, and three authors.

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**This series** is coordinated by Kenny Lin, MD, MPH, Deputy Editor.

## Substance Use Disorders: Considerations in Maternity and Neonatal Care

**Original Article:** Primary Care for Persons Who Inject Drugs

**Issue Date:** January 15, 2019

**See additional reader comments at:** <https://www.aafp.org/afp/2019/0115/p109.html>

**To the Editor:** I appreciated this article, but the review did not include discussion of maternal or child health. As primary care physicians who care for the mother/child dyad, family physicians are uniquely situated to provide comprehensive and longitudinal care for women and children affected by substance use disorders.

As many as 85% of pregnancies in women with opioid use disorder are unintended.<sup>1</sup> The rate of opioid use during pregnancy is 5.6 per 1,000 live births.<sup>2</sup> In women with confirmed substance use disorder, physicians should discuss planning for pregnancy and offer the full spectrum of contraceptive options, including emergency contraception, and especially long-acting contraceptives.

The American College of Obstetricians and Gynecologists recommends using a verbal screening tool, such as the 4 P's (parents, partners, past, present), NIDA (National Institute on Drug Abuse) Quick Screen, or CRAFFT (car, relax, alone, forget, family, trouble), at the initial prenatal appointment.<sup>2</sup> Screening should include alcohol, tobacco, and prescription and illicit drug use. Patients who screen positive for substance use disorder should be offered a brief intervention, motivational interviewing, and referral to treatment. Pregnant patients with opioid use disorder should have broadened sexually transmitted infection screening and should be screened for coexisting mental health disorders.<sup>1,3</sup>

The American College of Obstetricians and Gynecologists recommends opioid agonist therapy for pregnant patients with opioid use disorder.<sup>1</sup> Opioid agonist therapy prevents withdrawal symptoms, prevents illicit use and associated morbidity and mortality, and improves adherence to prenatal care. The combination of prenatal care and opioid agonist therapy reduces the risk of obstetric complications. If the patient is already undergoing opioid agonist therapy with methadone, buprenorphine, or buprenorphine/naloxone film (Suboxone), that treatment plan should continue. Evidence is growing that extended-release injectable naltrexone (Vivitrol) is also safe to continue during pregnancy.

Because the risk of relapse is high and withdrawal has been correlated with increased miscarriage rates, withdrawing from opioids is not recommended. If the patient insists on withdrawing from opioids, it should be done in a supervised medical setting.<sup>1,3</sup>

There has been a sharp increase in neonatal abstinence syndrome, from 1.5 cases per 1,000 hospital births in 1999 to 6 cases per 1,000 hospital births in 2013.<sup>4</sup> Symptoms of neonatal abstinence syndrome include irritability; jitteriness; tremors; difficulty sleeping; being inconsolable; high-pitched crying; exaggerated Moro reflex; hypertonia; and myoclonic jerks. Poor feeding and weight loss may also occur in infants born to mothers with opioid use disorder. Breastfeeding and skin-to-skin contact improve symptoms, reduce the need for pharmacotherapy, and shorten neonatal hospitalization. Breastfeeding should be encouraged in patients who are stable on opioid agonists, not using illicit drugs, and have no other contraindications (e.g., HIV infection).<sup>5</sup>

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## References

1. Saia KA, Schiff D, Wachman EM, et al. Caring for pregnant women with opioid use disorder in the USA: expanding and improving treatment. *Curr Obstet Gynecol Rep*. 2016; 5:257-263.
2. Haight SC, Ko JY, Tong VT, et al. Opioid use disorder documented at delivery hospitalization – United States, 1999–2014. *MMWR Morb Mortal Wkly Rep*. 2018;67(31):845-849.
3. American College of Obstetricians and Gynecologists. Committee opinion number 711. Opioid use and opioid use disorder in pregnancy. August 2017. Accessed March 29, 2019. <https://www.acog.org/-/media/Committee-Opinions/Committee-on-Obstetric-Practice/co711.pdf>
4. Patrick SW, Davis MM, Lehman CU, et al. Increasing incidence and geographic distribution of neonatal abstinence syndrome: United States 2009 to 2012 [published correction appears in *J Perinatol*. 2015;35(8):650-655]. *J Perinatol*. 2015;35(8):667.
5. Kocherlakota P. Neonatal abstinence syndrome. *Pediatrics*. 2014;134(2):e547-e561.

**In Reply:** We appreciate Dr. Dakkak's commentary regarding our article. We agree that the myriad of possible adverse effects from injection drug use during pregnancy necessitates an evaluation for pregnancy status and a discussion of contraception options as part of the complete evaluation and care of these patients. Given the rising prevalence of opioid use disorder during pregnancy,

a comprehensive review of opioid agonist pharmacotherapy during pregnancy, intrapartum and postpartum management, and neonatal abstinence syndrome would be of value to family physicians who often care for these patients.

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## Thessaly vs. McMurray Test for Diagnosis of Meniscal Injuries

**Original Article:** Knee Pain in Adults and Adolescents: The Initial Evaluation

**Issue Date:** November 1, 2018

**See additional reader comments at:** <https://www.aafp.org/afp/2018/1101/p576.html>

**To the Editor:** In this article on knee pain in adults, the authors contend that the Thessaly test is an accurate test for diagnosing meniscal injury. A 2012 article in *American Family Physician*<sup>1</sup> reached similar conclusions regarding the Thessaly test. This was a reasonable conclusion based on the evidence available at the time;

however, the patients in the studies cited in that article were diagnosed and treated at referral centers with high prevalence rates of meniscal injuries. Since 2012, additional evidence has suggested that the Thessaly test is not as accurate as initially reported.

A systematic review and meta-analysis of studies available through the end of 2014<sup>2</sup> concluded that the Thessaly test has similar, and perhaps slightly superior, accuracy when compared to the McMurray and joint line tenderness tests. However, the authors concluded that none of the three tests are particularly accurate for diagnosing meniscal injuries.

More recent studies have produced results that make us further question the accuracy of the Thessaly test (see accompanying table<sup>2-5</sup>).

The evidence summarized in the table indicates that the initial results of high accuracy of the Thessaly test are not replicated in later studies. The outlying results reported by Grover<sup>1</sup> may be explained in part by nonblinded examiners as well as a test population skewed toward high pretest probability of meniscal injury. We conclude, contrary to assertions in the reference article, that the Thessaly test is nonsuperior to the

TABLE

### Accuracy of Thessaly and McMurray Tests for Detecting Meniscal Injuries

Study	Test	Number of patients	LR+	LR-	Probability of meniscal injury if test is positive*	Probability of meniscal injury if test is negative*
Smith, et al. <sup>2</sup>	Thessaly	490	5.6	0.28	38.3%	3%
	McMurray	1,234	3.2	0.52	26.2%	5.5%
Snoeker, et al. <sup>3</sup>	Thessaly†	121	1.07	0.88	10.7%	8.9%
			0.91	1.12	9.2%	11.1%
Goossens, et al. <sup>4</sup>	Thessaly	593	1.37	0.68	13.1%	7.0%
	McMurray		1.27	0.67	12.4%	6.9%
Blyth, et al. <sup>5</sup>	Thessaly (primary care)	282	1.08	0.87	10.7%	8.8%
	McMurray (primary care)		1.33	0.74	12.9%	7.6%
	Thessaly (musculoskeletal clinicians)		1.38	0.691	13.3%	7.1%
	McMurray (musculoskeletal clinicians)		1.72	0.50	15.9%	5.3%

LR+ = positive likelihood ratio; LR- = negative likelihood ratio.

\*—Based on a pretest probability of 10%.

†—This study reported separate data for each of the two examiners.

Information from references 2-5.

McMurray test in the diagnosis of meniscal injuries. Moreover, there is little evidence to support using either of these maneuvers in the evaluation of knee pain, particularly in the primary care population.

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## References

1. Grover M. Evaluating acutely injured patients for internal derangement of the knee. *Am Fam Physician*. 2012;85(3):247-252. Accessed July 18, 2019. <https://www.aafp.org/afp/2012/0201/p247.html>
2. Smith BE, Thacker D, Crewesmith A, et al. Special tests for assessing meniscal tears within the knee: a systematic review and meta-analysis. *Evid Based Med*. 2015;20(3):88-97.
3. Snoeker BA, Lindeboom R, Zwinderman AH, et al. Detecting meniscal tears in primary care: reproducibility and accuracy of 2 weight-bearing tests and 1 non-weight-bearing test. *J Orthop Sports Phys Ther*. 2015;45(9):693-702.
4. Goossens P, Keijsers E, van Geenen RJ, et al. Validity of the Thessaly test in evaluating meniscal tears compared with arthroscopy: a diagnostic accuracy study. *J Orthop Sports Phys Ther*. 2015;45(1):18-24, B1.
5. Blyth M, Anthony I, Franço B, et al. Diagnostic accuracy of the Thessaly test, standardised clinical history and other clinical examinations tests (Apley's, McMurray's and joint line tenderness) for meniscal tears in comparison with magnetic resonance imaging diagnosis. *Health Technol Assess*. 2015;19(62):1-62.

**In Reply:** Thank you for your careful review and consideration of our article. We welcome the opportunity for additional discussion of physical examination maneuvers in the initial evaluation of knee pain.

Physical examination techniques remain a challenge to accurately study. Patient selection, timing from injury, previous patient functional level, examination setting, provider skills/training, and concomitant injuries are all potential confounders.

Our assessment is based on the volume of papers suggestive of Thessaly being superior.

Many additional references were ultimately not included in our article because of reference limitations. The article you cited supports our conclusion of higher sensitivity and specificity for Thessaly.<sup>1</sup> Added to this are articles by Karachalios, et al., yielding 92% sensitivity and 96% specificity for Thessaly<sup>2</sup>; and Harrison, et al., yielding 90% sensitivity and 97% specificity.<sup>3</sup>

Our interpretation of the data surrounding Thessaly continues to support its use (strength of recommendation taxonomy rating C), but we also recommend it as a patient-controlled examination technique. This subtle difference can increase a patient's comfort level and should not be overlooked.

We thank you for highlighting the challenges inherent in physical examination technique research as well as the ongoing debate about examinations in general.

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## References

1. Smith BE, Thacker D, Crewesmith A, et al. Special tests for assessing meniscal tears within the knee: a systematic review and meta-analysis. *Evid Based Med*. 2015;20(3):88-97.
2. Karachalios T, Hantes M, Zibis AH, et al. Diagnostic accuracy of a new clinical test (the Thessaly test) for early detection of meniscal tears. *J Bone Joint Surg Am*. 2005;87(5):955-962.
3. Harrison BK, Abell BE, Gibson TW. The Thessaly test for detection of meniscal tears: validation of a new physical examination technique for primary care medicine. *Clin J Sport Med*. 2009;19(1):9-12. ■