Tips from Other Journals

Tips from Other Journals are written by the medical editors of *American Family Physician.*

The trade names of drugs listed in Tips from Other Journals are based on what is currently available and not necessarily the brand of drug that was used in the study being discussed.

Spinal Manipulation vs. Home Exercise vs. Medication for the Treatment of Neck Pain

Background: Neck pain is one of the most commonly reported symptoms in primary care settings. Treatment options include medication, home exercise programs, and spinal manipulation (versions of which are used by osteopaths, physical therapists, and chiropractors); however, the comparative effectiveness of these modalities remains unclear. Bronfort and colleagues conducted a randomized trial to compare spinal manipulation therapy with medication and home exercise for the treatment of acute and subacute neck pain.

The Study: The authors randomized a total of 272 adults with nonspecific neck pain to receive spinal manipulation therapy, medication, or home exercise with advice over a period of 12 weeks. Eligible participants had mechanical, nonspecific neck pain of two to 12 weeks' duration and a neck pain score of 3 or greater on a scale of 0 to 10. Participants were excluded if they had progressive neurologic deficits or cervical spine problems, including instability, fracture, or inflammatory or destructive tissue changes.

Persons in the spinal manipulation group received low-amplitude spinal adjustments and mobilization at visits provided by chiropractors. Those in the medication group received nonsteroidal anti-inflammatory drugs, acetaminophen, or both, with muscle relaxants or narcotics as secondary therapy at the treating physician's discretion. The home exercise group was instructed in self-mobilization exercises, including neck retraction, extension, flexion, rotation, lateral bending, and scapular retraction. Home exercise group participants were instructed to do five to 10 repetitions of each exercise up to six to eight times per day. The number of patient visits for the spinal manipulation and medication groups was determined by the treating physician, whereas the home exercise group received two one-hour training sessions, one to two weeks apart. The primary outcome for all groups was participant-rated pain on a scale of 0 (no pain) to 10 (worst pain possible), which was measured biweekly during the 12-week intervention, as well as at 26 and 52 weeks posttreatment.

Results: There was significantly less participant-reported pain in the spinal manipulation group than in the medication group over the first 12 weeks (0.94-point greater reduction in pain; $P = .001$), with similar findings at 26 weeks (0.78-point greater reduction; $P = .009$) and 52 weeks (0.87-point greater reduction; $P = .005$). The home exercise group had a significantly lower average pain score than the medication group at week 26 (0.69-point greater reduction; $P = .021$), but otherwise these interventions had statistically equivalent pain scores at all other points. There was no difference in participant pain between the spinal manipulation and home exercise groups at any point.

Conclusion: Spinal manipulation appears to be more effective than medication for treating acute and subacute neck pain. However, no apparent benefits of spinal manipulation therapy were demonstrated over several instructional sessions of home exercise with advice.

KENNETH T. MOON, MD

Source: Bronfort G, et al. Spinal manipulation, medication, or home exercise with advice for acute and subacute neck pain: a randomized trial. *Ann Intern Med.* January 3, 2012;156(1 pt 1):1-10.

Which OCPs Are Best for Postpartum Women Who Are Breastfeeding?

Background: In postpartum women who are breastfeeding, progestin-only oral contraceptive pills (OCPs) traditionally have been recommended because of concerns about the effect of combination OCPs on milk supply. However, compared with progestin-only OCPs, combination OCPs are more effective, have fewer adverse effects, and are associated with a higher breastfeeding continuation rate. Espey and colleagues compared the effects of progestin-only and combined OCPs on breastfeeding rates and infant growth at eight weeks postpartum.

The Study: This single-center, double-blind, randomized controlled trial enrolled women at the University of New ▶

Downloaded from the American Family Physician Web site at www.aafp.org/afp. Copyright © 2012 American Academy of Family Physicians. For the private, noncommercial use of one individual user of the Web site. All other rights reserved. Contact copyrights@aafp.org for copyright questions and/or permission requests.

Mexico's prenatal clinics from January 2005 until June 2008. Women 15 to 45 years of age were eligible if they intended to breastfeed and use OCPs. Exclusion criteria included contraindications to estrogen-containing pills (e.g., a history of venous thromboembolism, complex migraine headaches, uncontrolled hypertension), preterm birth, small- or large-for-gestational-age newborn, and a newborn with a major congenital anomaly. Baseline data were collected, including maternal smoking and breastfeeding history, as well as newborn length, weight, and head circumference.

Women who were still breastfeeding at two weeks postpartum were randomized to start eight weeks of progestin-only or combined OCPs. The progestin-only pill contained the standard dose of 0.35 mg of norethindrone, whereas the combined pill contained 1 mg of norethindrone and 0.035 mg of ethinyl estradiol. Both cohorts received active pills for 21 days, and all participants received the identical placebo for seven days. The pills were packaged in identical capsules and blister packs. Research nurses contacted participants weekly by telephone to assess rates of and satisfaction with breastfeeding, formula supplementation rates, and satisfaction with their contraceptive. All mothers and newborns had a follow-up visit at eight weeks at which participants completed a questionnaire and infant growth parameters were recorded. Participants were given another four-month supply of OCPs, and completed a follow-up telephone survey at four and six months postpartum.

The primary outcome of the study was breastfeeding continuation in women at eight weeks postpartum. Secondary end points included breastfeeding rates at four and six months postpartum, and secondary outcomes included infant weight and length at eight weeks, as well as continuation and satisfaction with the contraceptive method. The eight-week time frame was chosen because it was assumed that any negative effects of combined OCPs on breast milk or breastfeeding would be evident by this time.

Results: At the two-week postpartum visit, 127 women were randomized to receive progestin-only (n = 63) or combined OCPs (n = 64). At this point, the groups had similar rates of exclusive breastfeeding (average of 64 percent) and perceived rates of inadequate milk supply (average of 22 percent). At eight weeks, similar percentages of women were still breastfeeding (approximately 64 percent in both groups). There was no difference in infant growth parameters. For those who stopped breastfeeding, perceived lack of milk supply was the most common reason for discontinuing. However, there was no significant difference between groups (55 percent of those in the combined OCP group versus 44 percent in the progestin-only OCP group stopped breastfeeding because of a perceived lack of milk supply; $P = .80$). Similarly, there was no difference between groups for those who stopped taking their OCP because of milk supply concerns (23 percent of progestin-only versus 21 percent of combined OCP users). At six months, there was no difference in breastfeeding rates between the two groups.

Conclusion: In this small study, combined OCPs and progestin-only OCPs resulted in similar rates of breastfeeding at eight weeks and at six months, with equal infant growth at eight weeks. Larger studies are needed to confirm the compatibility of combined OCPs with breastfeeding.

AMY CRAWFORD-FAUCHER, MD

Source: Espey E, et al. Effect of progestin compared with combined oral contraceptive pills on lactation: a randomized controlled trial. *Obstet Gynecol.* January 2012;119(1):5-13.

EDITOR'S NOTE: An accompanying editorial uses the study by Espey and colleagues to suggest opportunities for further research in postpartum contraception for breastfeeding women, especially in light of updated recommendations for postpartum estrogen-containing contraceptives.[1] In 2011, the Centers for Disease Control and Prevention (CDC) reviewed the World Health Organization's (WHO's) 2010 guidelines to include in the "Update to the CDC's U.S. Medical Eligibility Criteria for Contraceptive Use, 2010: Revised Recommendations for the Use of Contraceptive Methods During the Postpartum Period."[2] The WHO guidelines reflected new data on the risks of postpartum venous thromboembolism. The CDC recommends that women not start combined OCPs before three weeks postpartum because of thromboembolism risk, and that breastfeeding women not start before four weeks postpartum because of potential estrogen effects on breastfeeding. If, as this study suggests, combined OCPs do not affect breastfeeding continuation rates and infant growth, further studies may help clarify the risk of thromboembolism, as well as optimal OCP formulations and start time. Accordingly, the editorial suggests adhering to the four-week postpartum recommendations.—A.C.F.

REFERENCES

1. Queenan JT. Exploring contraceptive options for breastfeeding mothers. *Obstet Gynecol.* 2012;119(1):1-2.
2. Centers for Disease Control and Prevention. Update to CDC's U.S. medical eligibility criteria for contraceptive use, 2010: revised recommendations for the use of contraceptive methods during the postpartum period. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6026a3.htm#tab1. Accessed May 14, 2012. ■