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Evidence-based commentaries on women's reproductive health

ABSTRACT & COMMENTARY

What Do Fibromyalgia, Pelvic Organ Prolapse Symptoms, and Levator Ani Myalgia Have to Do with Each Other?

By Chiara Ghetti, MD

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Dr. Ghetti reports no financial relationships relevant to this field of study.

SYNOPSIS: Levator myalgia is a prevalent condition in women presenting with pelvic floor symptoms and is associated with greater symptom bother. Fibromyalgia is associated with an increased risk of levator ani myalgia in women presenting with prolapse.

SOURCE: Adams K, et al. Does fibromyalgia influence symptom bother from pelvic organ prolapse? *Int Urogynecol J* 2014;25:677-682.

The objective of this study was to determine whether women with fibromyalgia experience increased bother from pelvic floor disorders compared to women without fibromyalgia. This was a retrospective cross-sectional study of 1113 women presenting for urogynecologic evaluation over a 46-month period. The main outcome of this study was to compare mean Pelvic Floor Distress Inventory (PFDI) scores in women with prolapse with and without fibromyalgia. The PFDI is a 46-item, self-reported, validated, condition-specific questionnaire that assesses presence or absence of pelvic floor disorder symptoms as well as symptom-associated bother.[1] Secondary outcomes included several based on physical examination: anatomical extent of prolapse, the presence of levator ani myalgia and vulvodynia, as well as self-reported history of sexual abuse and depression. Anatomical extent of prolapse was assessed using the leading edge of prolapse or the largest anterior, posterior, or apical measurement as measured by the Pelvic Organ Prolapse Quantification examination. Levator ani myalgia and vulvodynia were routinely assessed by physical examination. For the purpose of this study, levator ani myalgia was defined as any pain with light palpation of any of the pelvic floor muscle groups.[2] Vulvodynia was defined as pain with the

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light touch of a cotton swab at any point along the distribution of the vestibule or vulva. PFDI scores were compared between women with prolapse with and without fibromyalgia. Multiple linear regression modeling was used to investigate the effect of depression and levator ani myalgia on the relationship between fibromyalgia and symptom bother scores while adjusting for body mass index (BMI).

The study recruited 1113 women who presented for urogynecologic consultation at a community-based urogynecology practice over a 46-month time period. Four hundred seventeen (37%) reported prolapse symptoms. Of these, 43 (7%) reported a history of fibromyalgia. Participants' mean age was 58 (standard deviation [SD] 12.7) years. BMI varied between groups, with women with fibromyalgia having higher BMI (30.5 kg/m^2; SD 8.4) compared to women without fibromyalgia (27.6 kg/m^2; SD 5.3; $P = 0.006$). Among women with prolapse symptoms, women with fibromyalgia reported about 50% more pelvic floor symptom bother as measured by validated pelvic floor questionnaires. Despite having more symptom bother, women with fibromyalgia had less severe anatomical prolapse as measured by the leading edge of prolapse. Average leading edge was 0.3 cm outside the hymen (SD 1.7) in women with fibromyalgia vs 0.9 cm outside the hymen (SD 1.8) in women without fibromyalgia ($P = 0.045$). Women with fibromyalgia were more likely to have levator ani myalgia (36%) compared to women without fibromyalgia (13%). Multivariable logistic regression found that pelvic floor symptom bother was significantly related to fibromyalgia, but even more so related to levator ani myalgia. In addition, levator ani myalgia was more associated with measurements of symptom bother than anatomical extent of prolapse.

■ COMMENTARY

Fibromyalgia is a common chronic condition characterized by widespread muscle pain and may also include fatigue, sleep disturbances, cognitive dysfunction, and mood disturbance.[3] It is more common in women than men. In the United States, it affects more than 5 million individuals (2-5% of the adult population),[3] and it is the most common cause of generalized musculoskeletal pain in women between 20 and 55 years.[4] It has been estimated that women have an 11-19% lifetime risk for undergoing surgery for prolapse or incontinence.[5,6] Levator ani myalgia is characterized by hypertonic and shortened pelvic floor muscles, often with myofascial trigger points.[7] It is known to contribute to chronic pelvic pain. The authors previously reported that levator ani myalgia is a prevalent condition in urogynecology practice and is associated with an increase in pelvic floor symptom bother including urinary, defecatory, and prolapse symptoms.[8]

This study, alongside the previously published study by the authors, brings to light a very important relationship between pelvic floor muscular pain and women's experience of pelvic floor symptoms including urinary, defecatory, as well as prolapse symptoms. Many studies have explored the absence of a linear relationship between anatomic prolapse and symptom bother. The authors present the important contribution of pelvic floor muscle pain in the perception of pelvic floor symptom bother. Levator ani myalgia remains under-recognized, under-treated, and under-studied.

I was fortunate to have been taught the evaluation of pelvic floor musculature as part of a systematic urogynecologic evaluation, and anecdotally and clinically I witness the relationship between pelvic floor muscle pain and pelvic floor symptoms on a daily basis. The authors' findings highlight for clinicians the important role that pelvic floor muscle health plays in the perception of pelvic floor disorders. Evaluating the pelvic floor musculature is an essential step in the evaluation and treatment of women with pelvic floor disorders. Women with pelvic floor muscle pain experience tender trigger points in several muscle groups including the levator ani muscles, suprapubic, iliopsoas, obturator internus, and piriformis.[9] Painful pelvic floor muscles can be caused by many conditions, including but not limited to, chronic constipation, chronic lifting, core muscle weakness, postural issues, and pelvic floor injury (birth-related, trauma, etc.). Painful pelvic floor muscles can cause abdominal pain, defecatory dysfunction, mimic urinary symptoms (urgency, frequency, hesitancy, dysuria), dyspareunia, and pain with sitting.[10] Pelvic floor myofascial pain can limit physical activity and impact quality of life and mood.[10]

Painful pelvic floor muscles can be effectively treated with pelvic floor physical therapy through the use of a combination of modalities.[9-12] Addressing pelvic floor muscle pain found on examination through physical therapy may have a role reducing pelvic floor symptom bother and may inform the management of pelvic floor disorders in women. ■

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ABSTRACT & COMMENTARY

Obesity and LGA

By John C. Hobbins, MD

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Dr. Hobbins reports no financial relationships relevant to this field of study.

SYNOPSIS: The findings in a recent study in which investigators evaluated the relative contributions of pre-pregnant weight, weight gain in pregnancy, and the presence of gestational diabetes on the rate of large-for-gestational age fetuses has shed light on how this true complication of pregnancy can be diminished.

SOURCE: Kim SY, et al. Association of maternal body mass index, excessive weight gain, and gestational diabetes mellitus with large-for-gestational age births. *Obstet Gynecol* 2014;123:737-744.

There has been a recent focus on downstream problems associated with pregnancies complicated by large-for-gestational age (LGA) fetuses. Since obesity is associated with LGA babies and the rate of obesity in the United States is still growing, a study has just surfaced to evaluate the effects of three variables — pre-pregnant weight, weight gain and pregnancy, and gestational diabetes (GDM) — on excessive fetal weight.[1]

The authors reviewed records from 2004 to 2008 from a Florida state hospital discharge database, as well as from birth certificates. Pre-pregnant body mass index (BMI) was recorded, as well as weight gain in pregnancy and infant weight at birth. The authors used the following guidelines for ideal weight gain in pregnancy: those with BMIs < 18.5 kg/m^2 (underweight) – 28-40 pounds; 18.5-25 kg/m^2 (normal) – 25-35 pounds; 25-30 kg/m^2 (overweight) – 15-25 pounds; > 30 kg/m^2 (obese) – 11-20 pounds. The authors further broke down obesity into three classes according to BMI: class I, 30-35 kg/m^2; class II, 35-40 kg/m^2; and class III, > 40 kg/m^2. However, the ideal weight gain requirements were the same across all classes of obesity.

LGA, defined as a birth weight above the 90th percentile, occurred in 5.7% of women with normal BMI, acceptable weight gain, and no diabetes. This was compared with women at the other end of the BMI spectrum (class III obesity) who had excessive weight gain and GDM. These patients had a rate of LGA of 35.1%. An important finding was that if one considered each factor individually, the rate of LGA was 17.3% in GDM, 13.5% when there is excessive weight gain, and 12.6% in those who were overweight or obese.

Among races, overweight Pacific Islanders had the highest overall rate of LGA of 48%, and the lowest occurred in overweight Caucasians, with a rate of 22.8%. The most important finding was that across all ethnic groups, the greatest contribution to LGA was excessive weight gain, responsible for a 33.3-37.7% increase, compared to GDM, which only added 2-8% to the rate of LGA.

■ COMMENTARY

Other Alerts have focused on the obesity epidemic in the United States. Large babies often come from large mothers and there is a strong evidence to show that large babies have higher rates of hypoxia, birth injury,[2] and are more likely to develop diabetes[3] and to be obese themselves later in life.[4] This in turn predisposes them to higher rates of asthma and even cancer.[2]

Recently it has become clear that some large babies are even more predisposed to later problems if they have more accumulated body fat than their counterparts of the same birth weight.[5] This type of excessive fat accumulation can even be suspected in utero with 3-D ultrasound measurements of fractional thigh volumes — a method superior to the standard biometric formulas to estimate fetal weight (which does not take into account the percentage of adipose tissue responsible for their overall size).[6]

Despite the gloomy statistics on obesity, there is hope that this national trend and the escalating costs associated with health care needs of the progeny of overweight women actually can be tempered. This study shows that curtailing weight gain in pregnancy can make the biggest difference, and a program to get women between pregnancies down to a reasonable starting pre-pregnant weight can also be very effective. In fact, in the same month (April), a study in the *American Journal of Obstetrics and Gynecology* has shown that initiating a contraceptive program immediately after pregnancy is very effective in attaining the ideal 18-month interval between pregnancies,[7] leaving ample time for overweight/obese women to drop their BMIs. Last, since obesity begets diabetes, the above steps will also diminish the incidence of LGA resulting from glucose intolerance. ■

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ABSTRACT & COMMENTARY

Genital Hair Removal: What Should We Be Advising Our Patients?

By Rebecca H. Allen, MD, MPH

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SYNOPSIS: In this cross-sectional survey of 333 women, the majority reported current pubic hair removal (87%), and two-thirds reported removing all their pubic hair. Most women (60%) had experienced at least one complication because of the removal, the most common complications being epidermal abrasions and ingrown hairs.

SOURCE: DeMaria AL, et al. Complications related to pubic hair removal. *Am J Obstet Gynecol* 2014;210:528.e1-5.

The authors surveyed women from two publicly funded reproductive health clinics at the University of Texas Medical Branch between April 2012 and June 2012 regarding pubic hair removal and sexual health. Women were approached for the study if they were between age 16 and 40 years. The 30-minute survey was available in both English and Spanish and addressed the degree and frequency of pubic hair removal and complications experienced. Women were excluded from the analysis (n = 33) if they had never removed their pubic hair, did not indicate how much pubic hair they removed, did not select a race/ethnicity category, or had missing body mass index data. In addition, 79 women who were approached declined to participate (17.6%), but they were no different in age or race/ethnicity from the participants.

In total, the responses of 333 women were analyzed. The mean age of participants was 24.7 years (SD 5.5) and 45% were Hispanic, 25% black, and 30% white. The majority (87%) were current hair removers. Two-thirds of the sample removed all their pubic hair while one-third partially removed hair. The most common methods used to remove hair were razor blade (89.5%), depilatory cream/foam (16%), electric razor (15%), trim (11.8%), wax (7.2%), laser (0.6%), and pluck (0.9%). Of the 194 women (59.5%) who had ever experienced a complication as a result of removing their pubic hair, 120 (37%) experienced an epidermal abrasion, 107 (33%) ingrown hairs, 69 (21%) severe itching, 60 (18%) cuts, 43 (13%) rash, 16 (5%) infection, 7 (2%) allergy, and 4 (1%) burns. There was no difference in the complications reported between total hair removers and partial hair removers. Only 4% of women had ever sought health care for a complication due to hair removal and only 4% reported discussing safe hair removal practices with a health care provider. Overweight/obese women were almost twice as likely to report experiencing complications than those women who were under/normal weight (odds ratio, 1.96; 95% confidence interval, 1.16-3.30).

■ COMMENTARY

It will not be a surprise to any practicing obstetrician-gynecologist that female pubic hair removal, including total hair removal, is a current trend in society. This practice is generally more common among adolescents and young women,[1] and, as this study shows, crosses racial and ethnic lines. Societal views of what is attractive have changed in the past decades as evidenced by media depictions of highly desirable women (e.g., *Playboy* magazine centerfolds, pornography).[2] Many adolescent

and young women have internalized these views and now feel that complete and total removal of pubic hair is necessary to be sexually attractive. Pediatric gynecologists find that girls are removing pubic hair as soon as they begin to develop it, making Tanner staging difficult.[3] Women report multiple reasons for removing their pubic hair including partner preference, increasing their own femininity and attractiveness, and to feel clean and sexy.[3] One study reported that pubic hair removal was associated with younger age, a greater interest in sex, finger stimulation to the vagina and clitoris, and having a casual sex partner.[4]

This study found that shaving with a razor is the most frequently used method of pubic hair removal. This is likely because it is affordable, accessible, and familiar to women from shaving their legs and underarms. The fact that epidermal abrasions and ingrown hairs were the most common complications also aligns with shaving as the most popular method. The authors hypothesized that overweight/obese women may have a higher rate of complications because they have more difficulty viewing the area that needs shaving. Based on the patients that I see in my office, I anticipated that this study would find a higher rate of complications due to hair removal and that more women would have sought medical care for complications. In the past decade, there have been increasing numbers of emergency department visits for genitourinary injuries related to grooming such as cuts from shaving, but also lacerations and burns from wax.[4] In addition, case reports of severe complications from shaving and waxing among women with diabetes, such as necrotizing fasciitis and sepsis, have been published.[5]

Nevertheless, total pubic hair removal is here to stay in our culture and, therefore, the question is how do we help our patients remove pubic hair safely? Certainly gynecologists are well-positioned to provide advice and manage complications in this area. Complications from pubic hair removal can include razor burn, mechanical folliculitis (ingrown hairs), infectious folliculitis (*Staphylococcus aureus*, *Streptococcus pyogenes*), spread of infection (human papilloma virus, molluscum contagiosum, herpes simplex virus), and contact dermatitis.[3] Diabetic and HIV-positive women should be warned regarding the risks of hair removal. Appropriate counseling for our patients regarding pubic hair removal can include the following[3]:

- Shaving
  - Trim pubic hair first.
  - Soak in warm bath beforehand.
  - Use shaving cream/gel, never dry shave.
  - Use a fresh blade for each session.
  - Shave in the direction of the hair.
  - Stretch the skin slightly to reach difficult areas; do not overstretch the skin.
  - Consider using aftershave lotion specific for the pubic area (after first testing for contact dermatitis on the arm).
  - For irritation and ingrown hairs, consider topical mild hydrocortisone cream (e.g., desonide 0.05% lotion) and topical antibiotic (clindamycin 1% lotion).
  - Go as long as you can between shavings to reduce irritation.
  - Wear cotton underwear and avoid tight-fitting clothing.
- Depilatories
  - Generally not advised in the pubic area due to risk of irritation and contact dermatitis.
  - If used, only apply products designed for pubic area.
  - Only apply on bikini area (area outside underwear).
  - Never leave the cream on longer than recommended.
- Waxing
  - Make sure wax is not too hot.
  - Be sure to use hygienic salons where staff wash their hands and wear gloves. ■

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SPECIAL FEATURE

SERMs: Where Are We in 2014?

By Jeffrey T. Jensen, MD, MPH

SYNOPSIS: Selective estrogen receptor modulators (SERMs) like tamoxifene and raloxifene are now well-established therapeutics, and new agents such as bazedoxifene and ospemifene have recently been introduced. These new agents have unique tissue-specific profiles that allow for a customization of therapeutic effect. In this review, the profiles of bazedoxifene and ospemifene will be compared and discussed relevant to their place in clinical practice.

The primary impact of publications resulting from the Women' Health Initiative (WHI) has been a movement away from traditional estrogen/progestin hormone replacement therapy (HRT). In my opinion,

this has been a disservice to menopausal women. More recently, there has been some positive movement to counter the negativism associated with hormonal treatment. The 2014 revision of the American Congress of Obstetricians and Gynecologists Practice Bulletin for management of menopausal symptoms provides a balanced discussion of benefits and risks of HRT that places the WHI findings in perspective with other literature.[1] Still, the public and many primary care providers remain confused and frightened.

Despite the well-established benefits of treatment of hot flushing, maintenance of bone density, and prevention or treatment of vulvovaginal atrophy (VVA) and dyspareunia, many primary care providers and some gynecologists are reluctant to recommend HRT. The biggest concern among most women is breast cancer, even though the primary risk of estrogen is an increased risk of thrombosis.[2] Thrombosis is an estrogen effect related to hepatic production of prothrombotic globulins. Bypassing the liver with transdermal or vaginal administration of estrogen can avoid this first pass metabolism. Transdermal estradiol is rapidly isomerized to estrone and estriol, and circulates at physiologic levels. However, if a potent synthetic estrogen like ethinyl estradiol is administered transdermally, the metabolites are highly potent, and the liver continues to interpret the overall estrogen milieu as elevated (i.e., pregnant) shifting the balance toward coagulation. An important multicenter case-control study in France (ESTHER study) documented that oral estradiol increases the risk of VTE, but that transdermal estradiol does not.[3]

The results of the combined oral estrogen/progestin and estrogen-only WHI studies also suggest that the inclusion of a progestin (or at least medroxyprogesterone acetate, MPA) may change the risk/benefit ratio. There was no overall impact on coronary heart disease with estrogen only treatment and a decreased risk of invasive breast cancer.[4] The evidence suggesting that MPA may attenuate the favorable effects of oral estrogens on lipids first emerged in the 1995 PEPI study.[5] Although we have no large randomized studies documenting the safety of alternative progestin regimens, it would make sense to reduce systemic exposure. I am a big fan of off-label use of locally administered levonorgestrel in the intrauterine system along with transdermal estradiol. Unfortunately, few women use this approach as insurance will not cover the off-label use.

One of the reasons that we don't have better options for endometrial protection is that the pharmaceutical industry has adopted a cautious approach to HRT. Since WHI, the emphasis has moved to alternatives to traditional estrogen therapy.

Selective estrogen receptor modulators (SERMs) provide tissue-specific effects through agonist and antagonist action on the two estrogen receptors (ERα and ERβ). The tissue expression of the two estrogen receptors, as well as downstream promoters of estrogen action, differ such that selective activation and blocking yield a variety of tissue-specific actions with various ligands. For example, tamoxifene, a SERM that has been in widespread use for many years for breast cancer treatment, antagonizes estrogen action in the breast and in the vagina, but acts as an agonist in the endometrium and in bone. Raloxifene is similar to tamoxifene. Neither is effective in the management of hot flushing. Both increase clotting risk similar to orally administered estradiol.

Recently, two new SERMS, ospemifene and bazedoxifene, have received FDA approval. A third, lasofoxifene, was associated with an increased risk of genital prolapse in a pre-marketing study and has not received FDA approval.

Ospemifene received FDA approval in 2013 for the treatment of moderate-to-severe dyspareunia due to menopause. The drug is provided as a 60 mg tablet to be taken once daily and is marketed on the company's website as the "only FDA-approved, NON-ESTROGEN, ORAL pill that actually improves certain vaginal tissue and significantly relieves moderate to severe painful intercourse due to menopause." Like raloxifene and tamoxifene, it does not treat hot flushes. The data for management of vaginal symptoms are good; in a Phase 3 clinical trial, postmenopausal women with VVA and self-reported vaginal dryness were randomized to once-daily ospemifene 60 mg/day (n = 303) or placebo (n = 302) for 12 weeks. The co-primary efficacy endpoints were the change from baseline to week 12 for the maturation index (MI) of vaginal epithelial cells and in the severity of the most bothersome dyspareunia symptom (MBS; vaginal dryness or pain). Significant improvements in the MI and vaginal pH were observed. The reduction in MBS severity score was significantly better with ospemifene (-1.5) compared to placebo (-1.2, $P = 0.0001$). The paper reports that, compared to placebo, the percentage of participants reporting no (38% vs 28%) or mild (25% vs 19%) vaginal pain with sexual activity at week 12 was greater in the ospemifene group, and that the severity of vaginal pain improved by two to three levels in 53% of the ospemifene group compared with 39% of the placebo group. However, the statistical significance of these findings is not reported.[6] Another Phase 3, double-blind, RCT evaluated 30 mg and 60 mg doses vs placebo with the MI as a primary outcome and included dyspareunia as a subjective complaint.[7] Both doses of ospemifene improved the MI and reduced complaints of vaginal dryness, but only the 60 mg dose resulted in a statistically significant reduction in complaints of moderate-to-severe dyspareunia (mean decrease 60 mg 1.19, 30 mg 1.02, placebo 0.89). In a third RCT, postmenopausal

women with VVA and self-reported vaginal dryness were randomized to once-daily ospemifene 60 mg/day (n = 160) or placebo (n = 154) for 12 weeks with the same outcomes as the earlier studies. Significant improvements in the MI and vaginal pH were observed. While there was improvement from baseline in the severity score of vaginal dryness in women receiving ospemifene, this was not significantly different from placebo.[8]

Clinical trials also have evaluated the endometrial safety of ospemifene.[9] In a combined series of 1242 women who received ospemifene 60 mg/day and 924 women who received placebo for up to 52 weeks in Phase 2 and 3 trials, no endometrial cancer or endometrial hyperplasia occurred with treatment. One participant who received ospemifene was reported to have simple endometrial hyperplasia without atypia on a biopsy done 3 months after the last dose of active drug.

Although the numbers of subjects in Phase 3 studies are typically insufficient to evaluate uncommon serious adverse events like thrombosis, the data with ospemifene are reassuring. In the overall clinical trial program, the incidence rate for deep vein thrombosis (DVT) was 1.45/1000 in women using ospemifene vs 1.04/1000 in placebo.[10] Despite this low event rate (1.5/1000 was the rate of DVT in the placebo arm of WHI), the FDA has placed the risk of DVT in the "Black Box" warnings related to this drug. The risk of endometrial cancer is also in this "Black Box."

Bazedoxifene (BZA) is a SERM that is marketed as a combination therapy with conjugated estrogens (CE). The idea is that the combination results in a "tissue selective estrogen complex" (TSEC) that allows for beneficial effects of estrogen action in some tissues (bone, brain [hot flushing], vagina [dyspareunia]) while blocking estrogen action in the endometrium and breast.[11] The FDA-approved product is an oral tablet containing 20 mg of BZA and 0.45 mg of CE. The approved indications are treatment of moderate-to-severe vasomotor symptoms associated with menopause and prevention of postmenopausal osteoporosis. The treatment of vulvovaginal atrophy and dyspareunia are not in the approved label.

The Selective estrogens, Menopause, And Response to Therapy (SMART)-5 trial was a multicenter, randomized, double-blind, placebo- and active-controlled study in postmenopausal women with an intact uterus evaluating endometrial safety and bone effects of BZA/EE.[12] Subjects (n = 1843) received oral BZA 20 mg/CE 0.45 or 0.625 mg, BZA 20 mg alone, CE 0.45 mg/ MPA 1.5 mg, or placebo. At 12 months, the incidence of endometrial hyperplasia in all active treatment groups was similar (< 1%) and no different from placebo. Bleeding patterns were significantly better with CE/BZA than with CE/MPA. At 12 months, all active treatment groups had increases from baseline in lumbar spine BMD, whereas the placebo group lost BMD; the results for CE/MPA were significantly better than CE/BZA. Results at the hip were similar with all active treatments. The incidences of breast tenderness with both doses of BZA/CE were similar to that with placebo and BZA and significantly lower than with that with CE/MPA. There was one VTE in a subject receiving CE/MPA. Cardiac disorders were seen among subjects receiving CE/BZA (coronary artery disease, myocardial infarction, angina pectoris; n = 1 each), but the overall incidence was no different than in the placebo group (arteriosclerosis, myocardial infarction; n = 1 each). None were observed in the CE/MPA group. Although a favorable breast-related safety profile (no increase in mammographic breast density or breast tenderness) was seen in the SMART-5 study with both doses of CE/BZA, there are no long-term clinical data on breast cancer prophylaxis or treatment with the combination.[13] The SMART-2 study demonstrated a significant reduction in hot flushes with both doses of CE/BZA compared to placebo.[12]

The CE/BZA label contains a "Black Box" that warns women: not to take additional estrogens; of an increased risk of endometrial cancer when using unopposed estrogens; that estrogen therapy should not be used for the prevention of cardiovascular disease or dementia; that women in the estrogen arm of WHI reported increased risks of stroke and DVT; and that women in the WHI Memory Study (WHIMS) estrogen only arm reported an increased risk of probable dementia. Since none of these refer to bazedoxifene, the warnings appear to reflect the conjugated estrogen component.

So does either of these new SERMs offer a groundbreaking advance in the treatment of menopause? In my opinion, the answer is no. I see little advantage over transdermal or vaginal estrogen with appropriate endometrial protection (e.g., lowest possible systemic dose, no MPA). While ospemifene does improve vaginal health and is technically not an estrogen, it offers no advantage over low-dose local estradiol available in vaginal tablets or the low-dose vaginal rings that also do not stimulate the endometrium. CE/BZA will offer bone protection similar to raloxifene with a reduction in hot flushing, but still uses oral CE. I think avoiding first pass effects with transdermal estradiol makes better sense for most women.

To summarize, you may have started reading this feeling uncomfortable about your knowledge of these new agents, wondering how they should fit into modern practice. Given the evidence, you may feel better about and more comfortable with your old friend estrogen. ■

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CME INSTRUCTIONS

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CME QUESTIONS

1. Which of the following is *not* true regarding pelvic floor muscle pain?
a. Painful pelvic floor muscles can be caused by many conditions.
b. Painful pelvic floor muscles can be effectively treated with pelvic floor physical therapy.
c. Evaluating the pelvic floor musculature is an essential step in the evaluation and treatment of women with pelvic floor disorders.
d. There is no relationship between pelvic floor muscular pain and women's experience of pelvic floor symptoms including urinary.

2. Which of the following is the greatest contributor to LGA?
a. Pre-pregnant weight
b. Weight gain in pregnancy
c. Diabetes
d. Previous history of shoulder dystocia

3. In the study by De Maria et al, which method of pubic hair removal was *not* among the top three?
a. Wax
b. Razor
c. Depilatory cream/foam
d. Electric razor

CME OBJECTIVES

Upon completion of this educational activity, participants should be able to:

- Explain the latest data regarding diagnosis and treatment of various diseases affecting women;
- Discuss new data concerning prenatal care, neonatal health, and complications arising in pregnancy and the perinatal period; and
- Discuss the advantages, disadvantages, and cost-effectiveness of new testing procedures in women's health.

[IN FUTURE ISSUES]

More Promise from Olaparib in Recurrent Ovarian Cancer: The BRCA Cohort