Fracture Risk Linked to Pelvic Organ Prolapse

Collagen deficiencies may explain the presence of prolapse, bone fragility in postmenopausal women.

BY KATE JOHNSON
Montreal Bureau

TORONTO — Women with pelvic organ prolapse may be at more risk for fracture, according to a new analysis of data from the Women's Health Initiative trial.

"As a clinician, if I see a woman who is early postmenopausal with moderate to severe prolapse, it would behoove me to get her bone density assessed to quantify her risk for fracture, because now I believe this woman is more likely to have some form of fragility phenomenon happening," said principal investigator Dr. Lubna Pal of Albert Einstein College of Medicine, New York.

The study, which she presented as a poster at the annual meeting of the Society for Gynecologic Investigation, was based on the hypothesis that collagen deficiencies may be a unifying explanation for both pelvic organ prolapse (POP) and enhanced fracture risk in postmenopausal women, said Dr. Pal in an interview.

There is a high incidence of both prolapse and fractures in collagen-deficiency disorders such as Marfan syndrome and Ehlers-Danlos syndrome, she said. And the connection is biologically plausible, given that 90% of bone is collagen (thus making deficiency a risk factor for fracture) and that qualitative or quantitative deficiencies of tissue collagen may be more common in women with POP, than in women without.

The cross-sectional analysis included 11,096 postmenopausal women aged 60 years or more who were part of the entire WHI cohort. It found moderate to severe POP in 9% of the subjects and fragility fracture (fracture after age 55 years) in 19%. After adjusting for confounders including age, body mass index, age at menopause, history of osteoporosis, late menarche, hormone replacement and oral contraceptive use, family history of fractures, smoking, nulliparity, and white race, the researchers found a statistically significant association between POP and fracture risk.

Women reporting moderate to severe POP were significantly more likely to have reported ever breaking a bone, compared with women with absent or mild POP (45% vs. 41%), and were also more likely to have reported a fragility fracture (21% vs. 19%), although this association was not statistically significant.

When bone mineral density (BMD) was analyzed in this context, women with moderate to severe prolapse had significantly lower total body and total hip BMD, compared with women who had absent or mild POP. They also had lower lumbar spine BMD—although this difference did not reach significance.

"Maybe as clinicians we should be recognizing this association and focusing on bone health in women who demonstrate genital prolapse," said Dr. Pal.

"We would first of all tell them they are at risk for fracture; [second,] identify any bone problems [that] are treatable; and [third,] try to optimize their bone collagen or protein content with calcium, vitamin D, weight-bearing exercise, and protein intake," she suggested. ■

Depression Risk Nearly Doubles When Women Enter Menopause

BY MARY ANN MOON
Contributing Writer

Women entering menopause are nearly twice as likely to develop depression as are women the same age who are not yet making the transition to menopause, reported Dr. Lee S. Cohen and his associates in the Harvard Study of Moods and Cycles.

"Transition to menopause has long been considered a period of increased risk for depressive symptoms," Dr. Cohen and his colleagues wrote, but studies on the issue have yielded conflicting results. This is partly because of methodological inconsistencies, including a tendency to define menopause based on questionable criteria such as the subjects' age alone, and the lack of standardized assessment of psychiatric symptoms, the researchers said.

Abrupt changes in hormone levels could contribute to mood and vasomotor symptoms.

DR. COHEN

In contrast, their study involved a population-based, cross-sectional sample of women aged 36 to 45 years who were prospectively followed every 6 months for several years.

Changes in menstrual cycle length and menstrual flow amount and duration were carefully tracked, and depressive symptoms were assessed using the Structured Clinical Interview for DSM-IV, as well as the Center for Epidemiologic Studies Depression Scale. Significant adverse life experiences and vasomotor symptoms also were assessed, said Dr. Cohen and his associates at Harvard Medical School, Massachusetts General Hospital, and Brigham and Women's Hospital, all in Boston.

The 460 study subjects had no history of major depression. A total of 134 were still premenopausal at the end of the last follow-up period, which occurred between 59 and 92 months after study enrollment. The remaining 326 women had entered menopause during that interval.

The rate of new-onset major depression was 16.6% in the menopausal women, compared with 9.5% in those who had not yet entered menopause, after the data had been adjusted to account for age at study enrollment and history of negative life events. "To our knowledge, this prospective documentation of increased risk for depression among women without a history of depression is unique," the investigators said (Arch. Gen. Psychiatry 2006;63:385-90).

This correlation between onset of depression and transition to menopause was noted both in women who used hormone therapy and in those who did not.

New-onset depression was more likely to develop in women who reported vasomotor symptoms than in those who did not. This association between depression and vasomotor symptoms is not yet fully understood. It is possible that hot flushes disrupt sleep "enough to adversely affect daytime functioning and to impact quality of life." Alternatively, "abrupt changes in neuromodulatory function and/or in reproductive-hormone levels could contribute to the constellation of mood and vasomotor symptoms," Dr. Cohen and his associates said. ■

New Device Described as Objective Test of Pelvic Floor Musculature

BY FRAN LOWRY
Contributing Writer

FORT LAUDERDALE, FLA. — The Colpexin sphere, an intravaginal device for women with advanced genital prolapse that supports the prolapse above the levator musculature and helps patients strengthen their pelvic floor muscles, can also serve as a test to objectively assess pelvic floor muscle contractility and strength, Dr. G. Willy Davila said at a symposium on pelvic floor disorders sponsored by the Cleveland Clinic Florida.

We have the ability to evaluate pelvic floor strength and to measure improvement.

DR. DAVILA

An objective test of the pelvic floor musculature has long been needed, said Dr. Davila, chairman of the department of gynecology at the Cleveland Clinic in Weston, Fla. Until now, clinicians have had to rely on subjective methods, such as manual testing using the Brink classification system, which was first published in 1989. "You can see from the date it was published that we really haven't done very much to improve our assessment of pelvic floor contractions," Dr. Davila said.

In using the Colpexin sphere pull test to objectively assess pelvic floor musculature strength and tone, a tensiometer is attached to the sphere and then the patient is asked to contract her pelvic floor muscles. The force required to extract the device while the woman is resisting its removal is then measured, explained Dr. Davila, who has received research funding from and is a consultant for Adamed Inc., the maker of the Colpexin sphere.

Early results with the Colpexin pull test show a significant improvement in contractile strength over a 16-week period in women with prolapse who performed Kegel exercises regularly with the sphere in place. "This is the first time that we have had the ability to objectively evaluate pelvic floor strength and to measure improvement over time in our patients," he said. The Colpexin device, which was developed in Poland, has just won Food and Drug Administration approval and will be marketed within a few months, Dr. Davila said. He stressed the importance of evaluating pelvic floor muscular function, both before therapeutic intervention for prolapse and as a way of measuring the intervention's success. "We spend a lot of time and energy in urodynamics with very sophisticated equipment, yet we don't spend a lot of time and energy evaluating their muscular function in the pelvic floor, which is probably equally as important." ■