Pregnancy, Breastfeeding May Cut Bone Loss

BY DOUG BRUNK

SAN DIEGO — The combination of breastfeeding and delaying pregnancy until a woman has acquired the majority of her bone mass appears to have a protective effect on bones, study of more than 600 women found.

“Several studies have shown that people who have had many pregnancies have less bone loss than women with no pregnancies,” lead author Dr. Peter F. Schnatz said in an interview.

“Our study is the first to our knowledge of the effect of pregnancy during the time of peak bone mineral acquisition and its eventual and ultimate effect on the development of postmenopausal osteoporosis,” Schnatz, who is the residency program director in the Department of Obstetrics and Gynecology at Reading (Pa.) Hospital and Medical Center, said at a poster session at the annual meeting of the North American Menopause Society.

The researchers found that women who breastfed and delayed pregnancy had a significantly lower prevalence of osteoporosis (8%) than women who did not breastfeed (10%), a finding that surprised the researchers. “It would seem that breastfeeding, which requires acquisition of calcium from the mother to nourish the baby, would cause bone loss,” Dr. Schnatz said. “We wonder if there may be a rebound anabolic phenomenon, hence resulting in overall benefit.”

Within the group of women who breastfed, those who were younger than age 27 years at their first pregnancy had a significantly higher prevalence of osteoporosis (11%) compared with those who were 27 years of age and older at their first pregnancy (5%). This result was in contrast to the trend in women who did not breastfeed, where the prevalence of osteoporosis was lower in those younger than age 27 years compared with those who were 27 years of age and older (25% vs. 5%).

Women who were at least 27 years old at first pregnancy had a significantly increased prevalence of osteoporosis in those who did not breastfeed, compared with those who did (25% vs. 5%).

Among women who did not breastfeed, there was little difference in the risk of postmenopausal osteoporosis if the first pregnancy occurred at or after age 22 or 27 years. Dr. Schnatz wrote. “Based on the current evidence, along with these results, women should be encouraged to wait until the postadolescent years for childbearing and should be encouraged to breastfeed,” he concluded. Dr. Schnatz acknowledged certain limitations of the study, including its retrospective design. The study was supported by an unrestricted grant from the Alliance for Better Bone Health. Dr. Schnatz and his associates had no other financial conflicts to disclose.

Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine Adsorbed

BY DOUG BRUNK

SAN DIEGO — Pregnancy is a period of rapid bone loss, but the current guidelines recommend inactivated vaccines during pregnancy. While efforts have been made to reduce the risk of adverse events, the vaccines may still cause complications.

“Despite the high risk of adverse events, vaccines are still recommended because of their protective benefits,” Dr. Reza Kass et al. said in an interview.

The researchers found that women who had given birth within 12 months of their first dose of the tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine adsorbed (TSW) had a significantly lower prevalence of osteoporosis (8%) than women who had not received the vaccine within 12 months (10%).

“The advantage of this study is that it is the first to our knowledge of the effect of pregnancy during the time of peak bone mineral acquisition and its eventual and ultimate effect on the development of postmenopausal osteoporosis,” Schnatz, who is the residency program director in the Department of Obstetrics and Gynecology at Reading (Pa.) Hospital and Medical Center, said at a poster session at the annual meeting of the North American Menopause Society.

Dr. Schnatz, residency program director in the department of obstetrics and gynecology at Reading (Pa.) Hospital and Medical Center, and his associates analyzed data from 619 women over 49 years old who presented for bone density scanning at one of four radiology groups in the Hartford, Conn., area. They assessed risk factors for osteoporosis, including a previous traumatic fracture of the hip or spine, pregnancy information, and dual-energy x-ray absorptiometry results. They defined osteoporosis as a T score of –2.5 or lower at the lumbar spine, the femoral neck, or the total femur.

The mean age of the study participants was 62 years, and 50% were either current or past smokers. Slightly more than one-quarter (27%) were using or had used a bisphosphonate, 64% were using or had used hormonal therapy, and 5% had used steroids.

Women with any breastfeeding had a significantly lower prevalence of osteoporosis (8%) than women who did not breastfeed (10%), a finding that surprised the researchers. “It would seem that breastfeeding, which requires acquisition of calcium from the mother to nourish the baby, would cause bone loss,” Dr. Schnatz said. “We wonder if there may be a rebound anabolic phenomenon, hence resulting in overall benefit.”

Within the group of women who breastfed, those who were younger than age 27 years at their first pregnancy had a significantly higher prevalence of osteoporosis, compared with those who were 27 years of age and older at their first pregnancy (11% vs. 5%).

Of the women who were at least 27 years old at first pregnancy, there was a significantly increased prevalence of osteoporosis in those who did not breastfeed, compared with those who did (25% vs. 5%).

Women who were at least 27 years old at their first pregnancy and who breastfed had a statistically lower prevalence of osteoporosis, compared with those who did not breastfeed, and those who had their first pregnancy at or after age 22 or 27 years.

Among women who did not breastfeed, there was little difference in the risk of postmenopausal osteoporosis if the first pregnancy occurred at or after age 22 or 27 years, Dr. Schnatz wrote.

“Based on the current evidence, along with these results, women should be encouraged to wait until the postadolescent years for childbearing and should be encouraged to breastfeed,” he concluded. Dr. Schnatz acknowledged certain limitations of the study, including its retrospective design.

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