Side Effects Similar in Both DMPA Formulations

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Major Finding: No significant differences were found in physical or sexual side effects in adolescents taking DMPA-IM and DMPA-SC.

Data Source: Randomized crossover trial of 55 adolescents.

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BY ROBERT FINN

FROM THE ANNUAL MEETING OF THE NORTH AMERICAN SOCIETY FOR PEDIATRIC AND ADOLESCENT GYNECOLOGY

LAS VEGAS — The intramuscular and subcutaneous formulations of depot medroxyprogesterone acetate seem to have similar side effect profiles in adolescents, according to a randomized crossover study.

Although the side effects of the two formulations (DMPA-IM and DMPA-SC) have been studied in adult women, this is the first study among adolescents, Dr. Rebekah L. Williams said at the meeting.

The randomized crossover study involved 55 young women aged 14-20 years, with a mean of 16.5 years. All participants were either initiating or restarting DMPA therapy. Among the young women, 85% were African American and 20% said they had never had sex.

At baseline, the participants completed surveys about their expectations regarding the side effects, and they were randomized to receive one of the two formulations. At the end of 3 months, participants answered questions about side effects, and then they were given the other formulation. At the end of another 3 months, they were again surveyed, and were permitted to choose which formulation they preferred for a third injection. Thirty-eight of the women completed surveys at all three visits.

The investigators found no significant differences between the two formulations in participants' expectations or experience of physical or sexual side effects. The experience of side effects was not significantly related to expectations of side effects, participants' level of general worry, or their level of general concern about birth control side effects.

With two exceptions, there was no difference in the expectation or experience of side effects between the participants' first and second injections, no matter in which order they received them.

The two exceptions were amenorrhea and irregular bleeding. During the first dose, 10.5% of the participants had amenorrhea, and this increased significantly to 31.6% at the second dose. In contrast, the proportion of women reporting irregular bleeding declined significantly from 26.3% at dose one to 7.9% at dose two.

Dr. Williams of Indiana University, Indianapolis, noticed a mismatch between expectations and experience for sexual side effects. "Over one-third of our sample experienced some change in sexual interest, and one-quarter experienced changes in lubrication during sex," she said. "The striking difference between expectations between physical and sexual side effects may reflect our clinical practice, in that physical side effects are emphasized during contraceptive counseling but sexual side effects may be relatively neglected.

"Clinical counseling should include both physical and sexual side effects, both of which have the potential to significantly impact young women's contraceptive use in the long run."

One difference between the intramuscular and subcutaneous formulations emerged when the women were allowed to choose which one they would receive at the third visit. Of the 38 women who made it to that visit, 26 chose a subcutaneous injection, 9 chose an intramuscular injection, and 3 chose to discontinue DMPA.

"I'm not 100% sure why we [saw] such a striking preference," Dr. Williams said, noting that there were no reported differences in injection pain during the injection, immediately after the injection, or 7 days later. ■