

# Decidual Casts, DMPA Linked in Young Patients

*Four cases suggest decidual casts might be a rare but important side effect associated with the contraceptive.*

ARTICLES BY  
SHARON WORCESTER  
Tallahassee Bureau

NEW ORLEANS — Decidual cast expulsion may occur in young patients using depot medroxyprogesterone acetate. Stephen M. Scott, M.D., said during the annual meeting of the North American Society for Pediatric and Adolescent Gynecology.

Although decidual casts are typically associated with ectopic pregnancy and can be confused with spontaneous abortion, Dr. Scott described four cases that suggest decidual casts might be a rare but important side effect associated with use of the hormonal contraceptive—particularly among those exposed after a prolonged period of anovulatory endometrial proliferation.

The first case involved a postanorexic 16-year-old girl who was on depot medroxyprogesterone acetate (DMPA) for contraception and presented 1 month after her first injection. She had a large amount of white tissue protruding from the cervical os.

The patient had experienced weight recovery and signs of estrogen stimulation at the time of the injection, but also

had persistent amenorrhea at the time of injection.

The second case involved a 20-year-old with cerebral palsy and mental retardation, who was using DMPA for the treatment of dysfunctional uterine bleeding. She presented with tissue passing from the vagina 3 weeks after her first injection.

The third case involved an 11-year-old with factor VIII deficiency, who was treated with DMPA to control hemorrhaging that occurred at her first menarche 8 months earlier. She presented with severe cramps and the sensation of a mass in the vagina.

An examination revealed white tissue protruding from the cervical os.

The fourth case involved a 19-year-old who had a vaginal delivery 5 months earlier and who at 3 months post partum was breast-feeding and amenorrheic. She began using DMPA for contraception at that time, and 2 months later, she presented with bleeding and cramping.

As with the first three cases, examina-

tion revealed a large amount of tissue at the cervical os.

The findings in each case were consistent with decidual cast expulsion, and all patients had a negative result on a pregnancy test. The removal of the protruding tissue resulted in symptom resolution, said Dr. Scott of the University of Colorado, Denver.

"We probably all feel comfortable with the fact that decidual cast formation is just an intense reaction and variant of menstruation, but because it is rare and unpredictable, we don't really have a great idea of what elements are needed in order to form a decidual cast and pass it," Dr. Scott said.

In theory, however, decidual cast formation can be expected when prolonged endometrial proliferation precedes progesterone exposure, leading to a thicker endometrial layer. When the progesterone levels falter, the likelihood of decidual cast formation may be increased, he said.

Although these cases involved varying clinical scenarios, it can be argued that similar hormonal events may have led to the decidual cast formation and passage, he added.

The first three patients had an extended period of amenorrhea with estrogen-only stimulation of the endometrial lining, and thus endometrial proliferation. The fourth patient also may have had prolonged estrogen production with resumption of ovarian estrogen production late in breast-feeding.

DMPA treatment in these patients would then have resulted in a high level of progesterone exposure followed by a gradual decline in progesterone levels that might have led to the decidual casts, he explained.

In most of these cases, the decidual casts were, understandably, very frightening for the patient and/or parent, he said.

For this reason, as well as to fully inform patients about the potential effects of DMPA and to promote treatment compliance, patient counseling should include discussion of decidual cast expulsion as a rare side effect associated with the drug.

Furthermore, because 1% of DMPA failures are ectopic pregnancies (although DMPA is not a known cause of ectopic pregnancies), and because decidual casts and ectopic pregnancies can be easily confused, patients using DMPA who experience tissue passage should be advised to bring the specimen in for evaluation, and should undergo a pregnancy test to avoid delays in diagnosis of ectopic pregnancies, he said. ■



**'We don't really have a great idea of what elements are needed in order to form a decidual cast.'**

DR. SCOTT

## Adolescent Girls Report Frequent Changes in Contraceptive Methods

NEW ORLEANS — Changes in contraceptive methods are frequent among adolescent girls, and tend to reflect pregnancy status and changes in sexual relationships and behaviors, Jennifer L. Woods, M.D., reported at the annual meeting of the North American Society for Pediatric and Adolescent Gynecology.

A 27-month longitudinal study of 275 sexually active girls aged 14-17 produced 1,513 pairs of sequential reports on contraceptive use. Of these, 19% consistently used no contraception, 38% consistently used condoms or hormonal contraception, and 43% changed contraceptive methods between quarterly reports during the study period, said Dr. Woods of Indiana University, Indianapolis.

Of those girls who said they changed contraception, 82% switched methods at least once during the period of the study, and 44% of the girls changed at least three times. About 4% of the changes were from hormonal contraception to no con-

traception, about 5% of the changes were from no contraception to hormonal contraception, 5% were from condoms to no contraception, and 5% were from no contraception to condoms.

Participants in the study included adolescent patients at pri-

**Researchers found significant predictors of change included pregnancy and fewer partners in the 27-month longitudinal study of 275 sexually active girls.**

mary care clinics. They completed interviews at study entry and exit, and every 3 months during the study period, during which they reported the types of contraceptive method used in the previous 3 months.

Method change was defined as any change in the reported contraceptive method at any two sequential quarterly visits.

Significant predictors of change included pregnancy and fewer sexual partners (which predicted both a change from hor-

monal to no contraception, and from condoms to no contraception), as well as not being pregnant and increased number of sexual partners (which predicted a change from no contraception to the use of condoms only).

There were no significant predictors of a change, however, from no contraception to hormonal contraception, Dr. Woods noted.

The findings are of concern, particularly given that consistent use of effective contraceptives by sexually active adolescents, which is among the federal government's

Healthy People 2010 national health objectives most relevant to adolescents, has been shown to protect against sexually transmitted diseases and/or pregnancy, Dr. Woods said.

Improved understanding of the factors related to contraceptive method changes could help improve contraceptive compliance, Dr. Woods explained, adding that health providers should emphasize the importance of contraceptive method stability. ■

## Birth Control Knowledge, Safe Sex Don't Necessarily Equate

NEW ORLEANS — Adolescent girls at high risk for pregnancy and sexually transmitted infections who participated in a recent study were knowledgeable about common birth control methods, but most reported having unprotected sex.

Of 332 girls aged 12-18 from a cohort with a high rate of pregnancy and sexually transmitted infections, 90% were aware of major birth control methods, including condoms and hormonal contraceptives.

The majority (84%) knew that condoms could help prevent sexually transmitted infections, but only 66% reported using a male or female condom the last time they had vaginal intercourse.

Only 43% used condoms each of the last five times they had vaginal intercourse, Ligia Peralta, M.D., reported in a poster at the annual meeting of the North American Society for Pediatric and Adolescent Gynecology.

Furthermore, a third of the girls who participated in the computerized survey used withdrawal as a means for preventing pregnancy, and more than

40% used oral and/or anal sex as a means for preventing pregnancy the last time they had sexual intercourse. Nearly 20% reported not using any type of birth control, wrote Dr. Peralta of the University of Maryland, Baltimore.

As for the use of hormonal contraceptives, 56% of 87 girls who used them said they use a long-acting injectable, 23% of the girls said they use a contraceptive patch, and 18% said they use OCs.

More than 70% of respondents said they would use combined, user-controlled hormonal contraceptives during the next 6 months, with the patch being the most popular choice (30% of respondents).

Easy-to-use, user-controlled, and combined hormonal contraceptives appear to be the trend of future contraceptive use among adolescents from this inner-city, high-risk population, Dr. Peralta reported, noting that although more than half of the hormonal contraceptive users used Depo-Provera, only 1.2% of that group expressed a desire to continue using it in the future. ■