DENVER — A gonadotropin-releasing hormone agonist appears to provide significant advantages over conventional GnRH agonist therapy for uterine preparation in recipients of frozen embryo transfer and egg donation cycles, according to Dr. Ilan Tur-Kaspa.

Clinical outcomes were similar with the two strategies in a randomized controlled trial. But patient satisfaction was greater with GnRH antagonist therapy because it entailed a mean of 81% fewer injections. It also enabled women to avoid troublesome estrogen deprivation symptoms — a major patient complaint with GnRH agonist therapy — and eliminated the waiting period between cycles, Dr. Tur-Kaspa reported at the meeting.

The study involved 90 women undergoing 118 randomized embryo transfer cycles. They were assigned to downregulation with a daily subcutaneous injection of 0.25 mg of the GnRH antagonist cetrorelix (Cetrotide) or a midluteal daily injection of 0.25-0.5 mg of the GnRH agonist leuprolide (Lupron). Cetrorelix was started on day 9-11 of estrogen treatment and continued until the day progesterone started. Leuprolide was started 7 days prior to the anticipated onset of menstruation and continued until the day progesterone was started, explained Dr. Tur-Kaspa, president and medical director of the Institute for Human Reproduction, Chicago.

He calls his GnRH antagonist strategy the EGAP protocol, for Estrogen with GnRH Antagonist followed by Progesterone. The two groups randomized in the trial were comparable in terms of age, body mass index, and endometrial thickness at various key time points. Embryo transfer, implantation, and clinical pregnancy rates were similar in the two study arms. Key outcomes per embryo were also similar in the two groups. (See chart.)

There were no significant adverse events in either study arm. Patients randomized to the GnRH agonist received a mean of 26.0 injections, compared with 5.2 injections per patient assigned to the GnRH antagonist.

Dr. Tur-Kaspa said that he serves as an adviser and on the speakers bureau for EMD Serono Inc., which provided partial support for his EGAP trial. ■

The latest figures indicate that infertility specialists are continuing to transfer fewer embryos in each cycle. For example, the average number of fresh embryos transferred from non-donor oocytes was 2.1 among women aged under age 35 years, 2.3 among women aged 35-37 years, and 2.7 among women aged 38-40 years. These are similar to figures reported in 2008. More women are also opting for single embryo transfer (SET). In 2009, 7.2% of cycles in women under age 35 years involved elective SET. In women aged 35-37 years, SET made up about 4% of cycles. Comparatively, in 2003, the percentage of cycles with elective SET in women under age 35 years was 0.7%, and that figure was 0.4% in women aged 35-37 years.

The trend toward transferring fewer embryos is encouraging, fertility experts agreed. “The trends are going the right way,” said Dr. Zev Rosenwaks, director of the Center for Reproductive Medicine and Infertility at Weill Cornell Medical College and New York Presbyterian Hospital, New York. But while SET is the safest approach, it does result in a lower pregnancy rate. That can make it a tough sell with women, especially if they have tried IVF in the past and have been unsuccessful, he said.

Dr. Brad Voorhis, director of the IVF unit at the University of Iowa, Iowa City, said his clinic has made a point of encouraging patients to consider SET, and it has had success. A summary report for 2008 states that the percentage of cycles with elective SET at his clinic was 33.1% among women under age 35 years and 30% among women aged 35-37 years. Part of the solution is to educate women about the potential complications of multiple births. Generally, patients are more accepting if they understand the risks involved, he said. But the clinic doesn’t leave the decision completely in the hands of patients. Dr. Voorhis and his colleagues will patients up front that in cases where there is a good candidate and a high-quality embryo, they will only transfer a single embryo per cycle. ■

DENVER — Long-term psychosocial outcomes in reproductive-age women with cancer are significantly better when the women receive pretreatment counseling regarding possible reproductive loss and the option of fertility preservation, according to a large survey.

The survey showed that while reproductive counseling by the oncology team is beneficial in terms of psychosocial outcomes, cancer patients who are referred to a reproductive endocrinologist and undergo fertility preservation via oocyte or embryo freezing subsequently report significantly less regret and higher satisfaction-with-life scores than those not receiving a referral, Joseph M. Letourneau reported.

He and his coworkers turned to the California Cancer Registry in order to study the impact of fertility preservation on psychosocial outcomes in young female cancer survivors. The registry has collected information on all cases of cancer diagnosed in the Golden State for the past 25 years.

The investigators utilized a survey instrument that incorporated three previously validated psychometric assessments of quality of life: the Decision Regret Scale, the Satisfaction With Life Scale, and the World Health Association 26-item Quality of Life BREF assessment. The survey had a 41% response rate, with complete responses received from 1,041 women having a history of leukemia, Hodgkin’s disease, breast cancer, non-Hodgkin’s lymphoma, or gastrointestinal cancer. Among the women surveyed, 918 had received pelvic radiation or systemic chemotherapy — treatments with the potential to compromise fertility. Respondents were currently a mean of 41.3 years of age, with 9.5 years since diagnosis of their malignancy.

Although the American Society of Clinical Oncology recommends that oncologists routinely discuss the possibility of reproductive loss and offer the option of fertility preservation for patients of reproductive age, only 63% of the California women reported that their oncologist mentioned that their treatment carried a risk of infertility. Five percent of women saw a fertility specialist prior to undergoing cancer therapy, and 4% underwent fertility preservation. Roughly 80% of referrals to a fertility specialist came from the patient’s oncologist, the rest from the primary care physician or self-referral, according to Mr. Letourneau, a medical student at the University of California, San Francisco.

Regret, as measured on the Decision Regret Scale, was significantly less in women who reported being counseled by their oncology team about the reproductive risk of their pending cancer therapy. They had a mean score of 10.8 on the 5- to 25-point scale, compared with 12.6 in women who didn’t receive counseling. Women who saw a fertility specialist had a mean score of 8.5, compared with 11.6 in those who did not. And those who preserved their fertility had a mean score of 6.5, vs. 11.6 in those who did not. A three-point difference on this scale is deemed clinically meaningful, he explained.

The WHO Quality of Life BREF assessment evaluates the domains of physical, psychological, and environmental health, as well as social relationships. Women who reported receiving counseling from their oncologist regarding the reproductive risk of cancer treatment scored significantly better in terms of physical and psychological health than those who did not. Social relationship scores were unrelated to reproductive counseling.

Mr. Letourneau said he had no relevant financial disclosures. His study received the American Society for Reproductive Medicine In-Training Award for Research from the society’s mental health special-interest group. ■