Endometrial function test helps improve ART success rates

By Roxanne Nelson

SEATTLE (Reuters Health) - A new immunohistochemical test of endometrial function can guide assisted reproductive technology (ART) procedures, and improve outcomes. Dr. Harvey Kliman of Yale University in New Haven, Connecticut, and colleagues, presented the findings here at the American Society for Reproductive Medicine 2002 annual meeting on Monday.

Abnormalities in the implantation process are believed to be a factor in many cases of unexplained infertility, said Dr. Kliman, especially when all other reasons have been eliminated and the patient continues to have repeated ART cycle failures.

"But once other issues are ruled out," he added, "we are still left with the issue of endometrial receptivity."

The endometrial function test uses "antibodies against progesterone receptors, mouse ascites Golgi mucin (MAG), cyclin E, and p27, to determine endometrial status. The researchers tested endometrial biopsies collected over a 2-year period from 195 patients with one or more previous ART failures, and compared them with results obtained from healthy controls. Follow-up data were collected every 6 months after the initial endometrial function test.

Abnormal endometrial test results were found in 145 (74%) of the women, and of this group, 37 received some type of intervention before attempting another ART cycle. Of these, 12 patients (39%) had subsequent endometrial function tests that were either normal or significantly improved. Seven of this group underwent another ART cycle, and five had an ongoing pregnancy.

Six patients did not undergo a follow-up endometrial test after intervention, but five of them did experience an ongoing pregnancy.

Seventeen women with an abnormal initial endometrial test did not undergo any type of medical or surgical intervention, but instead, went on to some type of ART cycle, explained Dr. Kliman. Of this group, seven (41%) did become pregnant but all except two patients miscarried in the first trimester.

Overall, 51% of patients with normal endometrial function tests eventually became pregnant, compared with 9% of those with an abnormal result who did not subsequently have any medical or surgical intervention.

"For the total number of patients that had interventions, there was an 80% pregnancy rate in that small group who previously had a high ART failure rate," concluded Dr. Kliman, adding that this is still pilot study and they are continuing to collect data.