

Pregnancy After Age 50: Application of Oocyte Donation to Women After Natural Menopause

A recent study by Sauer et al has shown that women as old as 59 years retain the ability to bear children if hormone replacement therapy and in vitro fertilization of oocytes from younger donors are provided. The researchers were able to establish pregnancies in 9 out of 14 women, aged 50 to 59 years. Three of these women had delivered at the time of publication; 4 were progressing normally beyond the second trimester; and 2 of the 9 pregnancies had obstetric complications involving preterm labor, preeclampsia, growth retardation, and/or gestational diabetes. Of the 7 pregnant or delivered women, 4 had never previously conceived.

As might be expected, however, there did seem to be a "male factor" in the study, as the partners who donated the sperm were also over age 50. A low overall fertilization rate was noted, with most of the nonfertilized eggs occurring among the 5 couples who were unable to conceive.

The authors conclude that there is little doubt that the uterus remains receptive to embryo implantation and can sustain normal pregnancy well beyond the limits of natural reproduction. They thus conclude that it is the aging of the ovaries and

oocytes, and not the uterus, that is responsible for most adverse fertility events associated with aging. Although there have been no serious complications, the authors do indicate that there are not enough data at this time to presume that the incidence of adverse results will not increase in women over 50. The psychologic consequences of giving birth after age 50 are also discussed in the paper, and the point is made that many children are raised by grandparents in various cultures.

Sauer MV, Paulson RJ, Lobo RA. *Lancet*. 1993;341:321-323.

Editor's comment: *This study demonstrates that women well beyond natural menopause may still achieve implantation of transferred embryos and carry these pregnancies to term. As the authors note, the average life expectancy and quality of life in our society are increasing, but physiology has limited women in their 50s and beyond. This new technology allows women the same range of choices that men have always enjoyed: the chance to concentrate on a career without worrying as much*

about the “biological clock,” or the chance to have children with a second partner, should a woman be divorced or widowed.

On the negative side, however, there are costs that must be considered as well. In vitro fertilization technology is extremely expensive. In addition, the authors note that extensive medical and psychologic screening should be conducted with women of advanced age who are considering pregnancy; the screening

process is also very expensive. At a time when we are realizing that we must somehow curtail skyrocketing medical costs — even to the point where rationing of health care is being considered — such expensive elective procedures must be carefully evaluated and debated.

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