

Age fertility relationship

The fecundity of women decreases gradually but significantly beginning approximately at age 32 years and decreases more rapidly after age 37 years.

Education and enhanced awareness of the effect of age on fertility are essential in counseling the patient who desires pregnancy.

Given the anticipated age-related decline in fertility, the increased incidence of disorders that impair fertility, and the higher risk of pregnancy loss, women older than 35 years should receive an expedited evaluation and undergo treatment after 6 months of failed attempts to conceive or earlier, if clinically indicated. In women older than 40 years, more immediate evaluation and treatment are warranted.

The age-related decline in fertility is accompanied by significant increases in the rates of aneuploidy and spontaneous abortion (8). Autosomal trisomy is the most frequent finding and is related, at least in part, to changes in the meiotic spindle (9) that predisposes to nondisjunction (10). Even for morphologically normal embryos selected for transfer in IVF

cycles, the prevalence of aneuploidy is high in women of advanced maternal age (11). The fetal loss rate also is significantly increased, even after fetal heart rate motion is detected by transvaginal ultrasonography (12).

Although 9.9% of women younger than 33 years who conceive during IVF with a fresh embryo transfer have a pregnancy loss after 7 weeks of gestation with fetal heart activity observed, the rates of miscarriage progressively increase from 11.4% for women aged 33–34 years to 13.7% for women aged 35–37 years, 19.8% for women aged 38–40 years, 29.9% for women aged 41–42 years, and 36.6% for women older than 42 years (12).

These data are similar to the increased rates of miscarriage reported nationally with IVF, where the rate of miscarriage increased progressively with age, from 13% in women younger than 35 years to 54% in women aged 44 years or older (7).

Therefore, given the anticipated age-related decline in fertility, the increased incidence of disorders that impair fertility, and an increased risk of pregnancy loss, women older than 35 years should receive an expedited evaluation and undergo treatment after 6 months of failed attempts to conceive or earlier, if clinically indicated.

The fecundity of women decreases during the reproductive years primarily because of continual oocyte atresia and becomes significantly compromised before the onset of perimenopausal menstrual irregularity.

Based on this conclusion, the American College of Obstetricians and Gynecologists and the American Society for Reproductive Medicine make the following recommendations:

- Education and enhanced awareness of the effect of age on fertility is essential in counseling the patient who desires pregnancy.
- Women older than 35 years should receive expedited evaluation and treatment after 6 months of failed attempts to conceive or earlier, if clinically indicated.
- In women older than 40 years, immediate evaluation and treatment are warranted.

References

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