

9th Yazd International Congress and Student Award on Reproductive Medicine with 4th Congress of Reproductive Genetics

Key Lectures

K-56

Genetic aspects of ovarian reserve

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Ovarian aging exhibits no obvious signs therefore women who delay pregnancy later in life may be faced with unexpected fertility issues. The ability to accurately predict a woman's reproductive lifespan is becoming of increasing importance. Ovarian reserve tests are typically a measure of antral follicles and roughly correlate with the number of primordial follicles remaining in the ovary. The rate of decline of the ovarian reserve is variable between women, and current ovarian reserve tests have limitations. Current

techniques, such as the anti-mullerian hormone (AMH) test, lack long-term accuracy and predictability. The identification of genetic variants associated with an increased risk of accelerated ovarian aging may allow for a more accurate and predictive screening tool. To present the current literature on genetic prediction of ovarian reserve and determine whether genetics markers of the ovarian reserve may complement the best current predictors of ovarian reserve. The advantage of using genetic markers of ovarian reserve is that they are present throughout life, and analysis only needs to be done once. Our data suggest that common variants influencing age at menopause may also modify the risk of accelerated ovarian ageing. Our results extend findings from recent genome-wide association studies and may guide future research efforts in identifying further genetic biomarkers influencing ovarian reserve.