Objectives

After this session, the participant will be able to:

1. Define preimplantation genetic screening and describe its benefits and limitations.
2. Describe clinical management and patient counseling in pregnancies resulting from IVF-PGS.
3. Describe the benefits of chromosomal microarray of products of conception after pregnancy loss.
4. Describe the advances in endometrial receptivity testing for implantation failure.

Outline

I. Preimplantation genetic screening
   - Indications for and benefits of PGS
   - Consideration of error rates associated with different genomic techniques for screening
   - Limitations and interpretation of results
     - Mosaicism and segmental aneuploidy
   - Management of first- and second-trimester screening in pregnancies resulting from IVF-PGS

II. Chromosomal microarray for pregnancy loss
   - Advantages over traditional cytogenetic testing (karyotyping)
   - Indications and patient selection
   - Practical considerations for tissue collection and commercial testing

III. Endometrial receptivity
   - Physiology of the implantation window
   - Genetic markers for endometrial receptivity
   - Endometrial receptivity assays for patients with recurrent implantation failure
Selected References


