

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

Key Lectures

K-84

Genetic and epigenetic aspects of endometriosis

Shahhoseini M^{1,2}.

1. Department of Genetics, Reproductive Biomedicine Research Center, Royan Institute for Reproductive Biomedicine, ACECR, Tehran, Iran.

2. Department of Cell and Molecular Biology, School of Biology, College of Science, University of Tehran, Tehran, Iran.

Email: m.shahhoseini@royaninstitute.org

Endometriosis is a major gynecological disease that affects over 10% of women worldwide. It is characterized by the implantation of functional endometrial tissue at ectopic positions generally within

the peritoneum. Endometriosis is recognized as a steroid-dependent disorder; however, the cause of endometriosis is unknown and there is no definite cure for it. This is mainly because of our limited knowledge about the pathophysiology of this disease at the cellular and molecular level. A PubMed search summarizes the key mediators of pain, abnormal uterine, bleeding, and infertility in endometriosis, including sex steroid hormone receptors, inflammatory molecules, extracellular matrix enzymes, growth factors, and neuroangiogenic factors. Therefore, clarifying the molecular mechanisms underlying endometriosis is essential in order to develop advanced therapies for the disease. In this regard, access to a precise genetic/epigenetic profile of endometriosis would be helpful for the diagnosis and treatment of the disease.