

Medicine and Infertility

Mohammad Ebrahim Parsanezhad Shiraz University of Medical Sciences, Iran

Abstract:

Endometriosis may reflect one of the underlying factors of infertility. This estrogen-dependent disease affects up to 10% of reproductive-aged women and up to 50% of women with infertility. Infertility is a major cause of morbidity in women with endometriosis. Thirty to fifty percent of endometriosis patients face infertility, and the condition reduces fecundity from 15% to 20% per month in healthy women to 2% to 5% per month in women with endometriosis. The exact cause of infertility is not definitively known, both pathologic and iatrogenic causes may exist. It has been hypothesized that several factors (anatomical, immunological, hormonal, genetic and environmental) may play a role in the pathogenesis of this chronic disease. The first step towards an accurate and prompt diagnosis of endometriosis includes physical examination of the pelvis and the abdomen that are followed by the imaging techniques, namely transvaginal sonography, rectal endoscopic sonography and magnetic resonance imaging (MRI), which are mainly employed for infiltrating lesions as well as for the detection of a possible ovarian endometrioma. The ultimate diagnosis could be accomplished through the method of laparoscopy.

Medical therapy can be helpful in managing symptoms, but does not improve pregnancy rates. The role of surgical treatment remains controversial. Superovulation with intrauterine insemination has shown modest improvement in pregnancy rates in women who may have endometriosis. The most effective treatment for endometriosis associated infertility is in-vitro fertilization. Recent focus on proteomics and genetics of the disease may aid in optimizing treatment options.

Graphical Abstract:

Mohammad Ebrahim Parsanezhad has graduated from Tabriz Medical School in 1979 and completed Obstetrics and Gynecology Specialty Board at Shiraz Medical School in1986. He has also completed 2.5 years of Infertility Fellowship at Gotingen University, Diako Medical Centre, Bremen Germany in 2003. He is currently a Professor and Chair, Infertility and Reproductive Medicine Division, Department of Gynecology & Obstetrics, Shiraz University, Iran. He is the Reviewer of Fertility & Sterility Journal, Member of Editorial board in Middle East Fertility Journal, Chairman of Educational Planning of Nursing.

Speaker Publications:

1. Determining an optimal cut-off value for follicle-stimulating hormone to predict microsurgical testicular sperm extraction outcome in patients with non-obstructive azoospermia" Archives of Endocrinology and Metabolism 64(AHEAD); 2. "The effect of antidepressant treatment on the HPA axis, changes in depression score and serum levels of TNF- α in depressed infertile women" Revista de Psiquiatria Clínical