ABSTRACT 003

RISK FACTORS ASSOCIATED WITH THE DEVELOPMENT OF ENDOMETRIOSIS

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Endometriosis, defined as the growth of endometrial-like tissue outside the uterine cavity, affects approx. 10% of reproductive age women and about 50% of women with infertility. It is often associated with chronic pelvic pain, dysmenorrhea, dysuria, dyspareunia and menorrhagia. The exact etiology of endometriosis is still unknown although several hypotheses have attempted to explain its development. The main hypotheses of the origins of endometrial cells at ectopic sites include retrograde menstruation, coelomic metaplasia and Müllerian remnants. Retrograde menstruation is regarded as an important origin. Nevertheless, retrograde menstruation is commonly observed in >90% of healthy menstruating women. Thus, other factors are clearly significant. Several factors including the genetic profile, menstrual characteristics, reproductive history, Müllerian duct anomalies and uterine growths, as well as the hormonal and metabolic environments have been suggested to be involved in the onset of endometriosis. Genome-wide association studies (GWAS) have until now, identified about 27 genomic regions significantly associated with endometriosis risk. Functional studies are, however, required to identify the contribution of these genetic variants to underlying biological pathways of endometriosis. Identification of endometriosis risk factors will increase understanding of endometriosis pathogenesis and promote development of non-invasive diagnostic methods and suitable endometriosis therapy.