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

Key Lectures

K-21
The reproductive microbiome

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The microbiota is defined as all of the micro-organisms that live in the human organs. Five distinct microbiota are determined in different anatomical locations of human body. Lactobacillus species are dominant healthy microbiota in the lower reproductive tract. These micro-organisms provide asuitable environment with low PH in the vagina that inhibits the growth of most pathogenic bacteria. Recently we know that the upper reproductive tract is not sterile and the endometrium has some own microbiota. However, the role of these micro-organisms in reproductive outcomes is less investigated. Researches confirmed lactobacillus- dominant vagina can lead to better outcomes with ART. Some studies showed endometrial dysbiosis can disrupt endometrial receptivity and lead to infertility. It seems non-lactobacillus-dominant microbiota in the reproductive tract can cause the lower chance of successful implantation and the high miscarriage rate. In recent years some oral and vaginal supplements are introduced as probiotic products and claimed that may recover vaginal environments with better reproductive outcomes.

Some studies recommended that pre-conception counselling and lifestyle modification can impact reproductive outcomes but more investigations are needed. It is important to know what factors can disrupt normal reproductive tract microbiota and how we can determine them.