Abstract

Statement of the Problem: Sperm before reaching the last segment of the uterine tube known as the “home stretch” pass through the utero-tubal junction (UTJ), where various functions are performed, including chemotaxis, and hyperstimulation of sperm, which is part of the last signals necessary to activate the swim towards the ovule. In such a way, the tubal duct is where a series of functions are combined that allow fertilization, which start from the first gateway, in the cervical canal. Currently, it is not possible to document evidence of sperm cell ascent in the tubular canal using any technology. The only way to confirm this is by confirming an ongoing pregnancy. For this, it is necessary that the permeability of the tubal pathway is preserved and that the sperm are able to ascend through the genital tract.

Methodology: Currently, the wide range of diagnostic tests for tubal patency facilitates a multidisciplinary and versatile approach, which allows an individualized and personalized approach to demonstrate the main function of the tubal segment; which consists of demonstrating tubal patency. In this context, the main diagnostic tests to assess tubal patency are reviewed.

Findings: Hysterosalpingography (HSG) can solve a minor problem, such as minimal adhesions, achieving therapeutic benefit at the same time as a diagnostic test. Today, ultrasound-assisted contrast methods allow good visualization of the contrast passage in the uterine tubes, such as 2d-HyCoSy.

Conclusion and significance: The multidisciplinary approach to tubal patency makes it possible to evaluate diagnostic alternatives and apply novel techniques, supported by existing traditional techniques in a reasonable manner. It is necessary to consider more investigations that contribute information to the joint study between the interactions of the transport factor, and to be able to demonstrate the ascent of the spermatozoa in the genital tract.

Biography

José María Murcia, is a doctor of medicine, specialist in gynecology and member of the spanish Society of Gynecology and Obstetrics. He began working as a doctor for the ministry of health, Bogotá, Colombia, followed by gynecology at the Clinical University of Pamplona (Spain). He then went on to focus on research at the University of Navarra, where he completed his doctorate. He has worked for more than 22 years in reproductive medical clinical consulting and biomedical research with a focus on biotechnology and human reproduction biomarkers related to natural human reproduction as an alternative to artificial reproduction techniques in cases of subfertility, sterility or infertility in both men and women. in women, and has multiple publications. It has developed a biosensor for the biophysical measurement of cervical secretion, a non-invasive biosensor that is used to determine the optimal state of female fertility, as well as other projects.

Publications

1. Outcomes from treatment of infertility with Natural Procreative Technology in an Irish general practice
2. The Medical & Surgical Practice of NaProTECHNOLOGY
3. Three-Dimensional Hysterosalpingo-ContrastSonography for the Assessment of Tubal Patency in Women with Infertility: A Systematic Review with Meta-Analysis