



مختبر فرايبورج الطبي الشرق الأوسط (ذ.م.م.)
FREIBURG MEDICAL LABORATORY MIDDLE EAST (L.L.C.)

Diagnostics on Lymphocytes Prior to Immune Modulation Therapy for Implantation Support

Prof. Dr. Michaela Jaksch, Freiburg Medical Laboratory, Dubai, UAE

IVF success rates strongly depend on both, the quality of the transferred embryos and the endometrial environment.

The fetomaternal cross-talk during implantation is complex and depends on many factors. Endometrial cells produce substances such as cytokines and growth hormones in order to regulate the implantation. The endometrium is ready to receive and implant the embryo only for a relatively short time span; this again is regulated by ovarian steroid hormones. 70% of embryos do not implant or are rejected at a very early stage. This is mainly due to chromosomal abnormalities as well as uterus abnormalities or hormonal- and coagulation abnormalities. However a significant number of early miscarriage or non- implantation cannot be explained.

One suspected cause is the immunological impairment of implantation. Diagnostics on peripheral lymphocytes include the following tests: lymphocyte differentiation with T-helper and T-suppressor ratio, natural killer cell- and cytotoxic B-cell concentration. In addition autoimmune diagnostics including antiphospholipid antibodies are performed. HLA antigen testing and investigation of 'anti-paternal' antibodies are discussed as well. More accurate information could be obtained by direct analysis of endometrial cells.

Therapeutically, possibilities are limited and are based mainly on empirical data using TNF alpha blockers, IVIG or corticosteroids.

In case of any questions please contact FREIBURG MEDICAL LABORATORY www.fml-dubai.com

Tel: +971-4-396 2227, Fax: +971-4-396 2228, E-mail: info@fml-dubai.com