

■ ELISA/ACT Biotechnologies LLC ■

LRA by ELISA/ACT® CLINICAL PEARLS UPDATE#31

Endometriosis

June 25, 2004

Dear Colleague,

What we have come to call autoimmunity may be a blocked effort of the body to repair itself. The following articles help us understand more deeply autoimmune activities in **endometriosis**. **LRA by ELISA/ACT® tests and plans** identify the reactive causes of autoimmune induction for each individual. This allows personalized plans to **reduce the reactive burden by substitution while a repair/energizing alkaline way diet, supplementation plan that enhances detoxification (particularly for xenoestrogens), and healing actions can be concurrently engaged**. These can now be considered **first line comprehensive care** and a suitable platform on which to build any immune rebuilding, tolerance/homeostasis restoring clinical program in women with endometriosis.

We encourage you to share this valuable clinical update newsletter with your colleagues and staff so they can learn more about how our comprehensive approach can be applied to their practice with beneficial results. Please also let us know if any of your colleagues or staff would like to be added to our email distribution list.

We are grateful for the opportunities to be of service to you and your patients.

Sincerely,

Russ Jaffe, MD, Ph.D., CCN, NACB
Lab Director

Matarese G, De Placido G, Nikas Y, Alviggi C. Pathogenesis of endometriosis: natural immunity dysfunction or autoimmune disease? *Trends Mol Med* 2003;9(5):223-228.

Gruppo di ImmunoEndocrinologia, Istituto di Endocrinologia e Oncologia Sperimentale, Consiglio Nazionale delle Ricerche, Dipartimento di Biologia e Patologia Cellulare e Molecolare, Università di Napoli Federico II, Napoli, Italy. gmatarese@napoli.com

Endometriosis is a chronic inflammatory disease, characterized by implantation and growth of endometrial tissue outside the uterine cavity. This disabling condition is considered one of the most frequent diseases in gynecology, affecting 15-20% of women in their reproductive life. Pelvic endometriosis, the most common form of the disease, is associated with increased secretion of pro-inflammatory cytokines, neo-angiogenesis, intrinsic anomalies of the refluxed endometrium and impaired function of cell-mediated natural immunity. Recently, endometriosis has also been considered to be an autoimmune disease, owing to the presence of autoantibodies, the association with other autoimmune diseases and recurrent immune-mediated abortion. These findings are in apparent contradiction with the reduced cell-mediated natural immunity observed during the disease. In this review, we focus on the multiple processes underlying the complex pathogenesis of endometriosis, with particular emphasis on the role played by the immune system with the induction of autoimmunity.

Nothnick WB. Treating endometriosis as an autoimmune disease. *Fertil Steril* 2001;76(2):223-231.

Department of Obstetrics and Gynecology, University of Kansas Medical Center, Kansas City, Kansas 66160, USA. wnothnic@kumc.edu

OBJECTIVE: To review the literature on the role of autoimmunity in the etiology of endometriosis, compare the similarities in the pathophysiologies between endometriosis and autoimmune diseases, and discuss the use of immunomodulators currently used to treat autoimmune diseases as potential therapies for endometriosis. **DESIGN:** The literature on endometriosis and other autoimmune diseases was reviewed, and summary data are presented. **RESULTS:** Endometriosis shares many similarities with autoimmune diseases such as rheumatoid arthritis, Crohn's disease, and psoriasis. These similarities include elevated levels of cytokines, decreased cell apoptosis, and T- and B-cell abnormalities. Because the use of immunomodulators and inflammatory modulators has proven to be an effective means of medical management for these autoimmune diseases, similar therapies may prove useful in treating endometriosis. **CONCLUSION(S):** Although substantial evidence indicates that endometriosis at least shares many similarities with autoimmune diseases, endometriosis is primarily treated by using compounds that induce a hypoestrogenic environment. A review of the literature combined with the shortcomings of current means of medical management for endometriosis support the postulate that treatment of endometriosis with immunomodulators and inflammatory modulators is warranted.