

P274. Can osteopontin be considered a biomarker for endometriosis?

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Introduction: Endometriosis is a multifactorial disease that is manifested by infertility and pelvic pain. Osteopontin was reported to act as a cytokine and, also as a cell differentiation antigen. The pathophysiologic substrate of endometriosis is based on chronic inflammation, in which, it has been proven that osteopontin has an important role

Objective: Our study tracked the osteopontin levels in the serum of women with endometriosis, in direct correlation with progesterone treatment and surgical cure, compared to the osteopontin serum levels of healthy women.

Material and methods: This was a prospective, case-control study that tried to establish the underlying cumulative risk factors of endometriosis. The study group included 52 patients with an age range from 21 to 42 years old. The study evaluated osteopontin levels measured in the serum of 40 patients with endometriosis and 12 healthy women using a standardized ELISA kit in three essential moments: the day of the diagnosis, 6 months after diagnosis, in the day of the surgery, and 6 months after surgery.

Results: Osteopontin serum levels were lower in endometriosis patients and increased after progesterone treatment. Our study showed that progesterone treatment of the patients with endometriosis, either before or after surgical treatment, increased the serum levels of osteopontin. The patients that were treated only by surgical means had a low level of OPN 6 months after the surgery comparative with those that followed treatment with oral desogestrel after the intervention.

Conclusions and Discussions: Our results showed OPN does not seem to be useful as a biomarker in the investigation of endometriosis, irrespective of its expression in endometrial tissue. We are basing our assertions on two facts: firstly, after the surgery, moment in which the patient is at least hypothetically cured, the OPN levels did not seem to suffer major variations compared with the control group and secondly, OPN levels seems to be highly influenced by the treatment with progesterone (desogestrel). Because of the large dispersion of data even in the control group, we find the association between osteopontin and endometriosis questionable.

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