Change of serum IGF-I and VEGF levels in the EMs patients

ZHAO Cai-xia

(Deptartment of Obstetrics and Gynecology, Maternal and Child Health Hospital, Yangzuan 075800, China)

[Foundation Project]: It is supported by Science and Technology Progress Project (2012)B004-07.

[Author]: ZHAO Cai-xia (1976-), Female, Attending Physician, M. B, Tel: 18931313857, E-mail: zhaocai1976@163.com.

Received: 2014-12-04 Revised: 2014-12-13
JHMC.2015;21(3):344-346

View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To observe the change of serum insulin-like growth factor-I (IGF-I) and vascular endothelial growth factor (VEGF) levels in the endometriosis (EMs) patients and their clinical significance. Methods: A total of 40 patients confirmed with EMs by postoperative histopathology who were admitted in our hospital from March, 2012 to May, 2013 were enrolled in our study and served as the observation group, among which 19 cases were at the I̶A ̶ F ̶ S ̶ ̶ I ̶ ̶Ⅰ ̶ ̶.staff stage, and 21 cases were at the III ̶ ̶ IV ̶ stage. While a total of 40 patients diagnosed with mature ovary teratoma by postoperative histopathology were served as the control group. The fasting venous blood was taken from the patients in the two groups before operation. ELISA was used to detect the serum IGF-I and VEGF levels and the relationship between the level change and EMs was analyzed. Results: The serum IGF-I and VEGF levels in the observation group were significantly higher than those in the control group (P<0.05); the serum IGF-I and VEGF levels in the observation group at the III ̶ ̶ IV ̶ stage were significantly higher than those at the I̶A ̶ F ̶ S ̶ ̶ I ̶ ̶Ⅰ ̶ ̶staff stage (P<0.05). Pearson correlation analysis showed that VEGF was positively correlated with IGF-I in the EMs patients (r=0.508, P<0.05). Conclusions: IGF-I and VEGF play an assistant role in the pathogenesis of EMs and are positively correlated with the severity of the disease. IGF-I and VEGF can be used as the therapeutic targets to block the generation of new vessels in the EMs lesions, which may become a new path to treat EMs.

[KEY WORDS] EMs; VEGF; IGF-I