ISO-3-4 Impacts of angiographic uterine artery embolization on ovarian reserve in the treatment of cervical pregnancy

The Affiliated Hospital of Medical College, Qingdao University, Qingdao, China

Xu Bing, Cao Yongxian, Duan Yuying, Jiang Nan, Yue Qian, Zhang Huimin

[Methods] Fourteen patients with cervical pregnancy were first treated by UAE to control or prevent vaginal bleeding. Curettage of cervical canal was performed immediately after UAE to remove gestational tissue from the cervix. Ovarian reserve assessments included measurements of serum anti-Mullerian hormone (AMH), FSH and E2 levels and of the total ovarian volume and antral follicle number by transvaginal ultrasonography. Measurements were performed before UAE, on the postoperative day 30, and on day 3 of the cycles occurring in months 3, 6, and 9 after UAE. This study was conducted with the approval of IRB. Results Of the 14 patients, 2 patients (age 42 and 44 respectively) demonstrated decreased AMH and elevated FSH levels after UAE. But no significant changes were found when compared with the levels before UAE. One of them demonstrated mild endometrial synechia which was confirmed by hysteroscopic examination. For the 12 patients younger than 40 years old, there were no significant changes from baseline in AMH, FSH and E2 levels, ovarian volume measurements, and antral follicle number counts measured before and after UAE. [Conclusions] Our study indicated that UAE did not have short- or mid-term adverse effects on ovarian reserve in the treatment of cervical pregnancy, particularly for the women younger than 40 years. However, whether UAE predisposes women aged over 40 years to ischemic injury to the endometrium and ovary needs further study.

ISO-3-5 Deterioration in fatty acid metabolism of visceral adipose tissue in postmenopausal women

Yamagata University, Keio University, Institute for Advanced Biosciences
Hizuru Yamatan, Kazuhiro Takahashi, Keiko Urushiyama, Takeshi Sudo, Tsuyoshi Ohta, Tomoyoshi Soga, Hirohisa Kurachi

[Objectives] The aim of our study is to clarify the difference in adipose tissue metabolism by using metabolomics between premenopausal and postmenopausal women. [Methods] Our study protocol was approved by IRB. Thirty nine (16 premenopausal and 23 postmenopausal) women were recruited and written informed consent was obtained from each woman. Both subcutaneous and visceral adipose tissues were collected at surgery. Metabolite profiling of adipose tissues were performed with capillary electrophoresis with electrospray ionization time-of-flight mass spectrometry. We investigated the effect of saturated fatty acids (SFA), palmitic acid (C16:0), pentadecanoic acid (C15:0) and palergonate (C9:0), on proinflammatory cytokines production in THP-1 macrophage. [Results] The concentration of metabolites of SFA, heptanoate (C7:0), octanoate (C8:0) and pelargonate in visceral but not in subcutaneous fat in postmenopausal women were significantly higher (p<0.05) than those in premenopausal women. Palmitic acid and pentadecanoic acid significantly (p<0.05) induced the expression of IL-6 and IL-8 mRNA in THP-1 macrophage. [Conclusion] Odd-chain fatty acids metabolism may be deteriorated in the visceral fat but not in the subcutaneous fat after menopause. This change might contribute to the activation of macrophages in adipose tissue, which cause the metabolic syndrome in postmenopausal women.

ISO-3-6 Clinical Study on Adolescent and Young Women's Endometriosis

College of Medicine, Kosin University, Busan, Korea
Young Lim Oh, Heung Yeol Kim

[Purpose] To review the diagnosis, age distribution, clinical stage and treatment options of endometriosis in adolescents. [Material and Methods] We retrospectively reviewed medical records of 27 women who admitted to Kosin University Gospel Hospital between January 2010 to June 2011. And compared with adult women, the chief symptoms leading to diagnosis, clinical stage, and treatment options of adolescent girls were reviewed. [Results] In adolescent patients, the chief symptoms leading to diagnosis were acute abdominal and pelvic pain (71%), but in adult patients were chronic pelvic pain and dysmenorrhoea (80%). The majority of the adolescent patients presented with stage III (42%), IV (58%), and older patients presented with stage III (60%). In all adolescent patients, GnRH agonists were used after surgery, and older patients, GnRH agonists (67%), expectant managements (33%) were used. [Conclusion] Endometriosis occurs in adolescents, and presenting symptoms may vary from those seen in adult women with the disease. Endometriosis is a progressive disease, thus adolescents with endometriosis require long-term management until the time in their lives when they have completed childbearing. They should be aware the presenting symptoms so that the adolescent can be promptly referred to a gynecologist to initiate appropriate surgical and medical treatment.

Key words: Adolescent, Endometriosis, Young women