ISP-9-7 Development of the model for prediction of treatment response of uterine myoma after Uterine artery embolization

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[Objective] Uterine artery embolization (UAE) is one of the uterus-preserving treatment option of uterine myoma, and is increasing recently. However, studies about factors predicting the therapeutic effect after UAE are limited. The aim of this study is to develop the model for prediction of treatment response of uterine myoma after UAE. [Methods] Between December 2008 and August 2014, 104 patients underwent UAE for managing uterine myoma in Seoul St. Mary's Hospital. We randomly decided 70% of the patients as a model group and 30% as a model validation group. Model group was divided into a high-response group and low-response group according to the reduction rate of both uterine volume and largest myoma after UAE. If the reduction rate was over median of the group, it was defined as a high-response group. And if the reduction rate was under median of the group, it was defined as a low-response group. We analysed about patient's age, body mass index, marriage, and parity. We measured uterine volume, largest myoma volume, diameters of myomas, location of myoma, T1 and T2 signal intensity of myoma, contrast enhancement, b 1000 and ADC in pelvic magnetic resonance imaging (MRI) before and after uterine artery embolization. t-test and Chi-squared test were used to analyse variables. After univariate analysis, we decided significant variables which used in development of the model using logistic regression analysis. And then, we verified the validity of the model using the ROC curve and box plot. [Results] In high-response group, the proportion of submucosal myoma was higher and the number of myomas and sum of diameters of myomas were less than low-response group (P<0.05). And T2 signal intensity of myoma and fibroid-to-muscle ratio was higher in high-response group. Location of myoma and T2 signal intensity of myoma was selected as significant variables through logistic regression analysis, and we developed the model using these two variable. The area-under-curve in ROC was 0.83 in the model and 0.791 in model validation group. [Conclusions] We developed the model for prediction of treatment response of uterine myoma after UAE using location of myoma and T2 signal intensity of myoma. This model's performance was satisfactory for estimating treatment response after UAE. This model will be useful to predict the response of UAE to and manage myoma patients in clinic.

ISP-9-8 Evaluation risk factors of uterine rupture after laparoscopic myomectomy using MRI findings

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[Objective] We aimed to evaluate risk factors of uterine rupture after laparoscopic myomectomy (LM) using MRI findings. [Methods] Subjects were women who were taken LM in our hospital between January 2013 and September 2015. We defined the thinning myometrium to be the thickness less than 50% of normal one. We evaluated whether there were differences about the thickness of their myometrium after LM among all cases, uterine -ruptured cases, and thinning myometrium cases. This study was conducted based on the approval of the ethics committee in our hospital. [Results] Result1 : The target cases were 126 patients, the uterine-ruptured cases were 3 samples. The former's median was 8.91mm (3.57-16.1), the latter's median was 4.72mm (4.24-4.99). As compared to the control group, the group of the uterine rupture was significantly thinner (p<0.01). Result2 : The thinning myometrium cases were 30 samples and their median was 6.15 mm (3.57-9.22). There was no difference between the thinning myometrium group and the uterine-ruptured group (p>0.05). [Conclusion] We demonstrated that their condition of thinning myometrium after LM have a risk of uterine rupture during pregnancy from result1. However, result2 indicates that the cause of the uterine rupture is not only thinning myometrium but also other factors. In the future, we believe that we will proceed with the consideration for other factors.

ISP-9-9 Gynecological examination for women with severe motor and intellectual disabilities

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[Objective] To estimate success in pelvic examination, pathology results of the cervical cytology and identify the physical risk factors for the failure of pelvic examination in women with severe motor and intellectual disabilities. [Methods] A retrospective review of charts for 33 women with severe motor and intellectual disabilities for data on the success in pelvic examination, pathology results of the cervical cytology and physical functions of the lower extremities such as the presence of high tone in hip adductor muscles, hip dislocation, hip contracture and knee contracture. Institutional ethical committee approved this study. [Results] Of the 33 women, 20 and 14 had physical function of high tone in hip adductor muscles and hip dislocation. Of these, only 11 pelvic examinations could be completed successfully. Of the 32 available cervical smears, 13 contained endocervical cells and no cytological abnormalities were present. The endocervical cells with success in pelvic examination were 72.7% and were 23.8% without success (p=0.007). High tone in hip adductor muscles with success was 27.2% and was 77.3% without success (p=0.006). Hip dislocation with success was 27.3% and was 50% without success (p=0.21). [Conclusion] For the success of pelvic examination, support for the relaxation of adductor muscles must be considered.