The Impact of Tumor Morcellation during Surgery on the Prognosis of Patients with Apparently Early Uterine Leiomyosarcoma (LMS)

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목적: Uterine LMS is a rare but aggressive disease. As there is no established preoperative diagnostic method, it is usually diagnosed after surgery and thus tumor morcellation is frequently performed. The purpose of this study is to evaluate the impact of tumor morcellation during surgery on the prognosis of patients with early uterine LMS.

방법: We performed a retrospective chart review of patients with stage I and II uterine LMS who underwent surgery between June 1989 and May 2010. The outcomes were compared between the group that underwent up-front total abdominal hysterectomy (TAH) without tumor morcellation (Group A) and that which underwent surgical management including tumor morcellation (Group B).

결과: During the study period, 50 patients (27 in Group A, 23 in Group B) with stages I and II uterine LMS were identified and included in this analysis. There were no significant differences between the two groups in terms of mean age, mean BMI, menopause status, follow up months, adjuvant treatment, and high-grade tumors \( (P > 0.05) \). However, there were some differences in ovarian preservation (44.4% vs 78.3%, \( P = 0.015 \)) and tumor size (8.6 vs 6.3 cm, \( P = 0.048 \)). There were no significantly correlation with the five-year disease free survival (DFS) and overall survival (OS) \( (P > 0.05) \) in age at diagnosis, para, menopause status, BMI, ovarian preservation, FIGO stage, tumor grade, mitoses, or tumor sizes among the prognostic factors. However, the five-year DFS and OS rates were 79.0% and 71.9% in Group A and 50.4% and 45.8% in Group B, respectively \( (P = 0.037 \) and \( P = 0.096 \)). Non-morcellated surgery improved five-year DFS compared with morcellated surgery, thereby suggesting that non-morcellated surgery was an independent prognostic factor for improving the DFS.

결론: These findings suggest that tumor morcellation during surgery may influence a worse prognosis than TAH for patients with early uterine LMS. Therefore, it is important to preoperatively determine the accurate diagnostic methods.