Extended Abstract

Utility of lymphadenectomy in mucinous ovarian carcinoma

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Objectives

Mucinous ovarian carcinoma is a rare subtype of epithelial ovarian cancer that, when grossly confined to the ovary, is rarely upstaged after surgical lymph node staging based on relatively small case series. While typically full nodal staging is recommended in all epithelial ovarian cancers, this retrospective data calls into question the risk/benefit ratio of complete surgical staging in mucinous ovarian carcinoma. Given the small numbers of reported fully staged mucinous ovarian cancers, our objective was to report our institution's experience.

Methods

Patients at University of Iowa Hospital & Clinics with a histologic diagnosis of mucinous ovarian cancer who underwent complete lymphadenectomy were identified in the Holden Comprehensive Cancer Center Registry between 2000 – 2018. Patient charts were reviewed for demographic, diagnostic, surgical and treatment data.

Results

A total of 70 patients were identified with primary mucinous ovarian cancer who underwent surgical nodal staging. All 70 patients underwent complete pelvic lymph node dissection, and most (95.7%, n=67) also underwent paraaortic nodal dissection. The median patient age was 54 years and mean tumor size was 20.2 cm. Tumor grades were Grade 1 (40.8%, n=29); Grade 2 (21.1% n=15) and Grade 3 (21.2%, n=15). 67 patients had disease confined to the ovary, and three had nodal metastases. Of the three patients with

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nodal involvement, one had obvious metastatic disease at the time of surgery with uterine involvement, omental involvement, and bulky lymphadenopathy. Another had areas of undifferentiated carcinoma within the underlying mucinous carcinoma; the undifferentiated carcinoma was the histologic pattern was identified in the lymph nodes. Only one patient with disease intraoperatively confined to the ovary with a purely mucinous histology had nodal involvement. Within 1 month of her staging surgery, this patient was subsequently found to have biopsy proven bony metastases to the iliac, lumbar and sacrum. On retrospective review of her surgical pathology, this was classified as an infiltrative-type mucinous carcinoma and pathology would have recommended additional stains have been done to rule out pancreatic or other primary malignancy.

Of our 68 patients with intraoperative disease confined to the ovary and pure mucinous histology, only one had nodal metastasis (1.5%) and it did not affect her treatment plan due to short interval development of widely metastatic disease.

Conclusions

This is the largest case series of fully staged mucinous ovarian cancer patients to date and supports that mucinous ovarian carcinoma grossly confined to the ovary is rarely upstaged by nodal staging and that nodal staging is unlikely to change management. It is reasonable to consider omitting lymphadenectomy in apparent ovarian confined primary mucinous ovarian cancer.

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