

## Editorial

# Secondary Cytoreductive Surgery for Isolated Nodal Recurrence of Ovarian Cancer

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Cytoreductive surgery for advanced ovarian carcinoma was first championed by Meigs<sup>1</sup> in 1935, with the suggestion that as much tumor as possible should be removed to enhance the effects of postoperative radiation therapy. In 1975, 40 years after Meigs' initial proposition, Griffiths<sup>2</sup> published a landmark study that first demonstrated conclusively an inverse relationship between residual tumor diameter and patient survival. Since that time, multiple retrospective reports have confirmed this observation. Although prospective data are lacking, the conceptual approach of primary tumor debulking followed by platinum-based combination chemotherapy is accepted as the standard of care for women with advanced-stage ovarian cancer.

Despite continued advances in chemotherapy and innovative developmental biological therapeutics, ovarian cancer can be expected to recur in 50% to 90% of patients with advanced-stage disease. During the past 20 years, secondary cytoreductive surgery has emerged as a viable treatment option for a select subgroup of patients with recurrent ovarian cancer.<sup>3,4</sup> In theory, secondary cytoreductive surgery can provide an immediate volume reduction of a large, poorly vascularized tumor mass, achieving a more favorable cellular kinetic profile of remaining malignant cells, decreasing the number of chemotherapy cycles needed to achieve another durable remission, and eliminating additional drug-resistant tumor cell clones. From a clinical perspective, secondary debulking surgery leaving no visible residual disease has

consistently been associated with a two- to threefold extension in median survival time after recurrence.<sup>3–6</sup> It is important to appreciate, however, that the observed survival benefit is highly correlated with specific selection criteria. An extended disease-free interval of at least 6 to 12 months reflects chemotherapy-sensitive disease and predicts a favorable response to subsequent treatment and prolonged survival. Tumor size and the extent to which the recurrence is localized, although poorly defined, have been associated with a higher probability of a successful secondary cytoreductive operation and improved survival.<sup>4–6</sup> Finally, a high functional performance status is also associated with a more favorable outcome and probably reflects a greater capacity to tolerate aggressive multimodality therapy.<sup>4</sup>

In this issue of the *Annals of Surgical Oncology*, Uzan et al.<sup>7</sup> present a series of 12 patients with isolated nodal recurrence of epithelial ovarian cancer having secondary cytoreductive surgery followed by individualized adjuvant therapy. Although this report is subject to the limitations inherent to a retrospective study of relatively restricted sample size, it is an important contribution to the existing literature in identifying a group of patients with a particularly favorable prognosis despite ovarian cancer recurrence. Consistent with previously published data, the authors employed strict inclusion criteria that would be expected to select patients with a favorable survival outcome (prolonged disease-free interval, initial ovarian cancer recurrence, no intraperitoneal disease, and complete surgical resection of nodal recurrence). Even so, the 5-year survival rate of 71% after recurrence observed in this study is exceptional. From a surgical standpoint, the analysis of surgicopathologic data in this study did not address the incidence of occult disease in the nodal basins surrounding the clinically detectable adenopathy. This leaves open to question whether a targeted lymph node excision or regional lymphadenectomy is more beneficial for cases of apparently isolated nodal recurrence. In addition, the indi-

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vidualized treatment approach of this study makes it difficult to draw definitive conclusions regarding appropriate adjuvant therapy following complete resection of recurrent nodal disease.

Nevertheless, Uzan et al.<sup>7</sup> are to be congratulated for their work, which is the first report to suggest that an apparent isolated nodal recurrence of ovarian cancer should perhaps be included among the favorable selection criteria for secondary cytoreduction. Ultimately, the management of patients with known or suspected ovarian cancer relapse must be individualized, tailoring the approach to the patient's extent of disease, performance status, long-term goals, and quality of life concerns. Secondary cytoreductive surgery cannot be universally endorsed for all patients with recurrent ovarian cancer but should be considered as a therapeutic option for the subgroup of women most likely to derive a significant survival advantage as a result.

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