11 Surgery for Ovarian Cancer

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Chapter Overview

At M. D. Anderson Cancer Center, exploratory laparotomy is the standard of care for patients with presumed ovarian cancer, and total abdominal hysterectomy, bilateral salpingo-oophorectomy, and tumor-reductive surgery are the standard of care for patients with confirmed ovarian cancer. Optimal tumor-debulking surgery—i.e., surgery resulting in no residual tumor nodules larger than 1 cm—is known to be associated with improved survival; therefore, the goal of surgery is optimal tumor debulking whenever feasible. Only patients who are unable to tolerate surgery or who have cancer that is known preoperatively to preclude optimal tumor reduction are considered for neoadjuvant chemotherapy. If neoadjuvant chemotherapy is administered, patients are reassessed after 3 or 6 cycles to see if they have become candidates for surgical debulking. Surgical debulking performed in this situation is referred to as interval debulking surgery or interval cytoreductive surgery.

We do not routinely perform second-look surgery outside the context of clinical trials because this procedure is of no known benefit to patients. Patients who have a complete clinical response to primary tumor
debunking and adjuvant chemotherapy are offered a second-look procedure only if they are candidates for and are interested in protocol therapy. If patients opt for second-look surgery, it is generally performed as a laparoscopic procedure, if technically possible.

Secondary tumor debunking can be considered for patients with residual disease detected on second-look surgery and for patients with isolated late recurrence. Palliative surgery can be used to relieve bowel obstruction and symptoms. Tumor debulking is not recommended in patients who will not receive postoperative chemotherapy.

**Introduction**

Most patients with suspected ovarian cancer have either an isolated pelvic mass or masses or suspected abdominal carcinomatosis. These can be found on clinical examination or on imaging studies, most commonly computed tomography (CT), ultrasonography, or both. Magnetic resonance imaging is not routinely used, as it is no more accurate than CT in the detection of abnormalities and generally costs more. Staging of ovarian cancer is surgical; therefore, surgery is important not only to establish the diagnosis but also to establish the extent of disease. Because of the potential for spread of early ovarian cancer, biopsy of sites of suspected malignancy alone is not recommended. Thus, when a patient presents with findings suggestive of ovarian cancer, evaluation for possible exploratory laparotomy is indicated.

Patients with ovarian cancer who wish to maintain fertility should be carefully evaluated, and several prognostic factors should be considered (see the chapter “Fertility-Sparing Options for Treatment of Women with Gynecologic Cancers”). In patients diagnosed with ovarian germ cell tumors and sex cord-stromal tumors, fertility conservation is the standard practice.

**Exploratory Laparotomy and Primary Tumor Debulking**

Exploratory laparotomy is used for diagnosis and staging, and in patients with confirmed ovarian cancer, primary tumor debulking, if feasible, is performed during the exploration.

**Preoperative Assessment**

For patients with suspected ovarian cancer, the preoperative assessment should include a careful personal and family history, a review of systems, and an assessment of surgical risk. Important points to cover in the history include gynecologic and obstetric history, gynecologic surgeries,