What Is the Role of Laparoscopic Surgery in Ovarian Cancer?

June 30, 2011
By N. Abu-Rustum [1]

Laparoscopic staging of apparent early ovarian cancer may be accomplished in patients where disease appears limited to the adnexa. For example a completely resected complex adnexal mass with intraoperative frozen-section revealing malignancy and no obvious limitation to complete laparoscopic staging.

The role of laparoscopy in ovarian cancer surgery may be divided into the following categories:
1- laparoscopic staging of apparent early ovarian cancer
2- laparoscopic assessment of disease extent and potential for resectability
3- hand-assisted laparoscopy for resection of selected cases of advanced ovarian cancer
4- laparoscopic reassessment, or second-look operation, or rule out recurrence.

Laparoscopic staging of apparent early ovarian cancer may be accomplished in patients where disease appears limited to the adnexa. For example a completely resected complex adnexal mass with intraoperative frozen-section revealing malignancy and no obvious limitation to complete laparoscopic staging. Laparoscopic staging may also be utilized in patients who have apparent early ovarian cancer and have undergone incomplete surgical staging. For example patients who underwent ovarian cystectomy or salpingo-oophorectomy and final pathology reveals ovarian cancer with no obvious measurable metastasis and no obvious limitation to complete laparoscopic staging. Laparoscopy may also be utilized to assess the extent of intraabdominal disease in advanced ovarian cancer and the potential for optimal or complete tumor resection. In addition, hand-assisted laparoscopy is emerging as a new surgical approach for resection of advanced disease with limited abdominal incisions.

Laparoscopy has been described as a method for surgical reassessment in patients with ovarian cancer since the early 1970s; however, these early reports were received with limited acceptance of laparoscopy as a replacement for laparotomy. The limitations of laparoscopic practice as described included inadequate visualization in up to 12% of patients [1] a high false-negative rate of approximately 11-55% [2] and a high complication rate, mainly bowel injury in 2-9% of patients [1,3]. In addition, there were limitations in performing extensive laparoscopic sampling of areas of tumor persistence including retroperitoneal lymph nodes. Several authors, however, have pointed out advantages to the laparoscopic approach including a reduction in the need for laparotomy in 36-50% of cases, a reduction in operating time, blood loss, hospital stay, and total hospital charges [2,4,5,6]. The safety of the laparoscopic approach has also been documented with minimal intraoperative and postoperative complications in more recent reports [5,6]. With advanced laparoscopic techniques, adhesions can usually be released to improve visualization of peritoneal surfaces, allowing suspicious lesions to be biopsied and areas of tumor persistence, including the pelvic and periaortic lymph nodes, to be sampled. Peritoneal washings can be obtained and intraperitoneal catheters can be inserted under direct visualization. There are, however, potential limitations to laparoscopy; mainly, the inability to palpate unvisualized areas and possible limited exposure to the posterior diaphragm mainly behind the liver, where disease may be missed [5].

References:

References

Source URL:

Links: