

The Role of Laparoscopic Triage in the Management of Advanced Ovarian Cancer:

A Review of Literature

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Abstract

Advanced ovarian cancer is frequently diagnosed at late stages, necessitating precise and individualized treatment strategies. Surgical cytoreduction remains the cornerstone of treatment, with complete macroscopic tumor resection offering the best survival outcomes. However, accurately assessing resectability remains a major challenge. This review aims to evaluate the role of staging laparoscopy in triaging patients with advanced epithelial ovarian cancer, with a focus on its utility in determining surgical resectability and guiding treatment pathways. Emphasis was placed on predictive scoring systems: clinical scores (Suidan score), operative scores (Fagotti, PCI, Eisenkop) and postoperative scores (Aletti). Laparoscopic triage has shown greater predictive accuracy than traditional imaging in evaluating tumor resectability. Scoring systems such as the Fagotti and the Peritoneal Cancer Index provide validated intraoperative frameworks. International guidelines, such as ESMO, ESGO, NCCN, and ASCO, support laparoscopy for preoperative assessment, although its implementation remains limited in some countries, including Romania. Challenges include the lack of standardization, restricted access to advanced laparoscopic infrastructure, and the risk of port-site metastases. Staging laparoscopy is a valuable tool in the management of advanced ovarian cancer, aiding in the selection of optimal treatment strategies. Future integration of radiomics, artificial intelligence, and molecular profiling holds promise for fully personalized patient care.

Keywords: ovarian cancer, laparoscopy, triage, cytoreductive surgery, neoadjuvant chemotherapy