Surgical intervention in relapsed ovarian cancer is beneficial: pro

P. Harter¹, F. Heitz¹, S. Mahner², F. Hilpert³ & A. du Bois¹

¹Department of Gynecology & Gynecologic Oncology, Kliniken Essen-Mitte, Essen; ²Department of Gynecology & Gynecologic Oncology, University Medical Center Hamburg-Eppendorf, Hamburg; ³Department of Gynecology & Obstetrics, University Schleswig Holstein Campus Kiel, Kiel, Germany

Several reports have suggested that secondary cytoreductive surgery in relapsed ovarian cancer is beneficial. This review is summarizing the positive aspects of this approach, which have led to this suggestion.

Key words: ovarian cancer, ago score, cytoreductive surgery, relapse

Despite improvements in surgery and chemotherapy, many patients with advanced ovarian cancer relapse and require further therapy [1, 2]. The standard of care in this clinical scenario is chemotherapy [3–5]. The choice of chemotherapy depends on the treatment-free interval, prior therapy, expected toxicity and patient preference [6]. So far, reports in cytoreductive surgery for patients with relapse within 6 months have not shown a meaningful benefit and therefore, surgery for patients with early relapse is not recommended. In contrast, several authors reported promising results in secondary cytoreductive surgery in patients with platinum-sensitive relapse [7, 8]. A meta-analysis has shown an increase of 3 months in overall survival per 10% additional complete resection rate in the series [9]. Based on the available evidence, the fourth Ovarian Cancer Consensus Meeting in Vancouver stated that the aim of this type of surgery is complete resection [10]. Some series also reported a survival benefit in patients with residual disease of ≤1 cm [11, 12]. However, these findings were not significant or had other limitations like case mix including early relapse, surgery for palliative care, or remarkably low survival rates in patients with ≥1 cm residual disease. Furthermore, it was already shown that preoperative factors like peritoneal carcinomatosis might be a negative predictor for complete resection, but is not a prognostic factor if complete resection is feasible [13].

Therefore, selection of eligible patients is important to avoid unnecessary surgical risks in patients in whom complete resection of the tumor could not be achieved. The DESKTOP I study evaluated the Arbeitsgemeinschaft Gynäkologische Onkologie (AGO) score, which could help to identify patients in whom complete resection is possible. Patients with complete resection at first surgery (if unknown, alternatively stage I/II), good performance status and absence of ascites were categorized as AGO score positive, all others were score negative [14]. A subsequent prospective trial validated the AGO score, successfully showing that a positive score could predict the possibility of complete resection in patients with platinum-sensitive relapse in 76% of the patients [15]. Despite the fact that survival advantage of additional surgery has not been shown in a randomized trial so far, the results seem to favor surgery in addition to chemotherapy in eligible patients. The median survival of completely debulked patients ranges from 16 to 100 months. In contrast, the above-mentioned chemotherapy studies rarely did report an overall survival of ≥30 months.

Depending on the experiences and surgical capabilities, postoperative morbidity and mortality rates are varying, but complication rates in surgery for recurrent ovarian cancer are not significantly higher, compared with primary debulking surgery. The morbidity rate in a meta-analysis of surgery in recurrent ovarian cancer ranged between 0% and 88.8% with a weighted mean of 19.2% [9]. Thirty-three percent of patients had at least one complication in the postoperative period. In the DESKTOP II trial, the perioperative mortality was 0.8%. Nevertheless, these data are most prone to be affected by selection and publication bias, since there is neither strict definition for morbidity, nor for the observed time after surgery.

A recent Cochrane analysis investigated the value of cytoreductive surgery in addition to chemotherapy in patients with recurrent ovarian cancer. The authors did not identify eligible studies to answer this question [16]. Two prospective, randomized trials evaluating the role of cytoreductive surgery in patients with platinum-sensitive recurrent ovarian cancer are ongoing (AGO DESKTOP III, GOG 213).

Support of these studies is urgently needed to define the role of secondary cytoreductive surgery in patients with recurrent ovarian cancer.

disclosure

The authors have declared no conflicts of interest.

references


