

Review 1

The article is good. I have no comments. Best regards

Review 2

Please shorten the introduction part.

Answer: Introduction part has been shorten.

INTRODUCTION

Each year, worldwide, more than 295.000 females are diagnosed and 185.000 die from ovarian cancer, which remains the most lethal among all gynecologic malignancies [1, 2]. There is currently no screening test for ovarian cancer and early symptoms are usually misleading and scarce, resulting in an advanced stage at diagnosis. As a result, about two thirds of cases are diagnosed at a late metastatic stage and 12-33% are FIGO stage IV primarily [3]. Ovarian cancer metastatic patterns include peritoneal and lymph node dissemination, as well as hematogenous spread [4]. FIGO stage III ovarian cancer corresponds to the most common pattern of spread, peritoneal dissemination, usually in a form of miliary tumor foci, with possible involvement of the hepatic capsule and right hemidiaphragm. According to FIGO classification, perihepatic metastases are considered as stage III, while liver parenchymal metastases as stage IV [5]. Up to 50% of females dying of some sort of gynecologic cancer had concurrent liver metastatic disease at autopsy [6, 7]. Staging, optimal cytoreductive surgery and platinum-based chemotherapy is historically considered the "standard of care" for newly diagnosed advanced stage ovarian cancer. However, up to 90% of women optimally debulked, having had adjuvant chemotherapy eventually develop relapse and disease progression [8]. An alternative treatment for initially inoperable disease consists of neoadjuvant chemotherapy, followed by cytoreduction [9, 10]. The strongest disease progression predictor in any case is the level of cytoreduction, even at the interval setting, usually determining overall

survival [11-13]. Because of the importance of the completeness of cytoreduction, exceptional surgical skills are required to reach "no visual tumor" at the end of the operation, throughout the abdominal cavity and especially in difficult to treat areas, such as the upper abdomen. Completeness of cytoreduction may require procedures, such as peritonectomy, diaphragmatic resection and multiple visceral resections. [14-19]. Ovarian cancer liver metastases are considered for surgical therapy, though with controversial indications and patient selection criteria. Addressing liver metastases of ovarian cancer origin still represents a boundary to complete cytoreduction. Several studies have announced the feasibility and efficacy of hepatic resections in the setting of advanced ovarian cancer [20-22]. There are several other modalities of therapeutic approach of liver metastases, such as thermal ablation (radiofrequency ablation-RFA, microwave ablation-MWA, cryoablation, laser induced thermotherapy-LITT), transarterial chemoembolization (TACE), computed tomography-guided high-dose-rate brachytherapy (CT-HDRBT) and stereotactic body radiation therapy (SBRT).

With the present review we aim to summarize recent advances in the management of ovarian cancer liver metastases. The value of the involvement of different medical and surgical specialties and subspecialties is demonstrated. A multidisciplinary approach to advanced ovarian cancer is essential so as to achieve optimal treatment outcomes.