

Evolutions in the management of advanced ovarian cancer

Advanced ovarian cancer has the lowest survival rates and cure rates remain dismal; as a result it remains the most challenging gynaecological cancer to manage. All multidisciplinary specialities involved in the management of advanced ovarian cancer are fighting tirelessly to expedite evolutions that would transform the course of this ruthless disease towards simply a chronic condition. Allowing patients affected to live longer, even if repeated sequences of therapies are required.

Our series "Evolutions in the Management of Advanced Ovarian Cancer" is designed to provide all interested readers with a thorough and comprehensive understanding of areas of evolution taking place, throughout the patient journey. A number of comprehensive and narrative reviews have been included in this series.

Different factors determine triaging patients with advanced ovarian disease to either primary debulking surgery (PDS) or neoadjuvant chemotherapy (NACT) followed by interval debulking surgery (IDS). Inappropriate upfront laparotomies, have a negative impact on survival. The role of staging laparoscopy (S-LPS) in clinical practice has increased significantly as a preoperative assessment tool, and the evidence of such practice in surgical planning for ultra-radical surgery, is undoubtedly in the patient's best interest (1-7).

As confirmed by evidence from different published studies, maximal survival benefit is reached when the surgical target of zero residual disease (also known as R0) is achieved. To balance the best favourable oncologic outcome without deranging the morbidity profile, mastery of dissection techniques in the upper abdomen is mandatory. The principles of safe and efficacious upper abdominal surgery should be something gynaecological oncological surgeons are fully familiar with (8-14).

Among the surgical challenges in advanced ovarian cancer management is the frequent need for multiple bowel resections (MBRs) to achieve complete cytoreduction (R0). The resulting post-operative morbidity and mortality were very high until NACT was used as a successful strategy to reduce the aggressiveness of debulking surgery (especially in frail patients) without affecting the overall survival (15-19).

The vast majority of patients with advanced ovarian cancer have multiple co-morbidities. When they then need to undergo major open and extended surgeries, these patients represent a significant challenge for anaesthetists. The challenges faced, strategies to overcome, and effectiveness of these strategies aiming to improve recovery and potentially long-term outcomes have been reviewed (20,21).

It is also well known that the majority of newly diagnosed patients with stage III/IV ovarian cancer will relapse, despite the optimum upfront treatment given. A literature review of the challenges and opportunities in ovarian cancer relapse, including second- and third-line chemotherapy, recent clinical trials and the role of surgery in prolonging survival in relapsed disease are all thoroughly discussed in our series (22-25).

The challenges faced by histopathologists with chemotherapy response score (CRS) reporting for measuring response to NACT in IDS specimens or after full chemotherapy, and its utility in determining progression-free and overall survival rates, have been covered in an interesting written mini-review by Sanjiv Manek.

Through greater understanding of ovarian cancer biology, with further advances in molecular diagnostics, and by identification of new molecular pathways, evolutions in chemotherapeutic treatment occurred over the last decade, that changed the global view and approach to ovarian cancer management.

We hope that all interested and involved individuals in the management of advanced ovarian cancer will find our series comprehensive and elaborative, covering evolutions in different aspects of the multidisciplinary management of this complex and challenging disease.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, Gynecology and Pelvic Medicine for the series "Evolutions in the Management of Advanced Ovarian Cancer". The article did not undergo external peer review.

Conflicts of Interest: Both authors have completed the ICMJE uniform disclosure form (available at https://gpm.amegroups.com/article/view/10.21037/gpm-23-14/coif). The series "Evolutions in the Management of Advanced Ovarian Cancer" was commissioned by the editorial office without any funding or sponsorship. HSM served as the unpaid Guest Editor of the series and serves as an unpaid editorial board member of Gynecology and Pelvic Medicine from June 2020 to May 2024. The authors have no other conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Keywords: Advanced ovarian cancer; evolutions; treatment

Received: 23 March 2023; Accepted: 05 May 2023; Published online: 11 May 2023.

doi: 10.21037/gpm-23-14

View this article at: https://dx.doi.org/10.21037/gpm-23-14

doi: 10.21037/gpm-23-14

Cite this article as: EL-Tawab S, Soleymani Majd H. Evolutions in the management of advanced ovarian cancer. Gynecol Pelvic Med 2023;6:1.