Ann Surg Oncol
https://doi.org/10.1245/s10434-022-12556-3

Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

ASO AUTHOR REFLECTIONS

# ASO Author Reflections: Fertility-Sparing Treatment for Early-Stage Cervical Cancer 2 cm or Larger in Size: A Problem Still Open

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## PAST

The role of fertility-sparing treatments (FST) has become crucial in early-stage cervical cancer (ECC) management considering the increasing age of first pregnancy in Western countries. The guidelines recognize various approaches[1,2] (conization, vaginal trachelectomy, minimally invasive trachelectomy, abdominal trachelectomy, and neoadjuvant chemotherapy combined with conization or trachelectomy) depending on the tumor stage and other risk factors such as histotype and lymph-vascular positivity.[3] However, the choice of the best strategy remains an open problem. One of the significant limitations is the size of the tumor. In particular, no consensus exists on the strategy to be adopted in the case of an ECC 2 cm in size or larger. The current orientation of the scientific community comprises groups with a surgical approach and groups using neoadjuvant chemotherapy (NACT), but these approaches are not standardized, and no direct comparison between them is available in the scientific literature. This study aimed to collect the literature evidence regarding the management for this type of patient.

## PRESENT

This review systematically searched articles about oncologic outcomes after FST for ECC size 2 cm or larger in April 2022 from the first publication. The review included all the studies containing data about disease-free survival (DFS), overall survival (OS), recurrence rate (RR), or complete response rate (CR) after chemotherapy. The review included 691 patients.[4] Of the 26 selected studies, 14 presented data about surgical FST. Surgery-based FST showed an RR of 0% to 42.9%, and excluding a vaginal or minimally approach, the percentage stands at 12.9%. The remaining 12 articles were about FST using NACT and showed a CR rate of 21.4% to 84.5% and an RR of 0% to 22.2%. The study results were limited by the absence of randomized clinical trials with a direct comparison between the two methods. Nevertheless, the results show RRs with a wide gap, underscoring the need to improve sample selection for FST. However, on the one hand, the study confirmed what already is known to the scientific community, namely, that patients with ECC size 2 cm or larger are patients at high risk for recurrence. On the other hand, it showed how in some instances and certain profiles, FST can lead to excellent oncologic outcomes. This also could be related to the wide variety of surgical and chemotherapeutic approaches in the literature, making standardization even more difficult.

## FUTURE

The aforementioned results suggest a significant heterogeneity in the clinical management for FST of ECC size 2 cm or larger. Also, the significant heterogeneity in

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First Received: 1 September 2022
Accepted: 1 September 2022

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Published online: 15 September 2022

the NACT schemes, which led to highly variable complete response rates, make it difficult to set a standard of treatment. These data require that the scientific community further investigate the differences between approaches for precise sets of patients. Studies are needed to investigate the underlying causes of this heterogeneity of outcomes and build randomized clinical trials to provide the best personalized treatment for ECC patients. Nevertheless, approaches limited to minimally invasive or vaginal techniques seem to show the highest RR and should not be suggested as FST. Furthermore, this review represents a partial view of the problem of fertility preservation focused on oncologic outcomes. The authors' research group currently is conducting a similar review focused on fertility outcome (CRD42022329253).

**DISCLOSURE** There are no conflict of interest.

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