Gynaecology & Obstetrics Case report
ISSN: 2471-8165

Open Access Mini Review

Gynecologic Cancer Surgery and Fertility Preservation

Amruta Jaiswal*

Department of Gynaecology, University of Salerno, Baronissi, Italy

ABSTRACT

Gynaecological cancers are distinguished by the fact that they affect organs directly involved in reproduction. The current treatments (surgery, radiotherapy, and chemotherapy) frequently have a negative impact on subsequent fertility. With improved screening and treatment, an increasing number of young patients are being diagnosed and cured at an earlier stage, but they are also losing their fertility. Fertility must be considered as an important aspect of quality of life following cancer treatment. When gynaecologic cancer develops in these young patients, it has significant psychological consequences, not only because of the announcement of a long and potentially fatal illness, but also because of necessary therapies that can result in permanent sterility. In vitro fertilisation, oocyte freezing, cryopreservation of ovarian tissue that can be subsequently transplanted by ortho- or heterotopic autograft, and cryopreservation of ovarian tissue for in vitro maturation] have been evaluated, and the patient and her partner can be informed of these options; these techniques are discussed in another chapter of this thematic issue. Organ-sparing surgery aimed at preserving the uterus and at least one ovary is increasingly being used in the treatment of early-stage gynaecological cancers in women of childbearing age.

Keywords: Gynaecological cancers; Fertility; Fertility-sparing treatment; Pregnancy

INTRODUCTION

Its objective is to keep reproductive organ functionality by reducing the invasiveness of the surgical procedure, allowing for the possibility of future pregnancy. The option of fertility-saving surgery is only available in a subset of cases defined by the disease's stage, histology, grade, and prognostic factors. The indications and modalities of fertility-sparing surgical treatment of the major gynaecological cancers involving the uterine cervix, endometrium, and ovaries will be discussed in this article. Pre-cancerous in situ or microinvasive cervix lesions are not covered in this chapter, and borderline ovarian tumours are covered in another chapter of this thematic issue. The literature on cervical cancer is dense and rapidly evolving. More than 3000 cases of fertility-sparing treatment have now been published. The selection of patients eligible for fertility preservation is based on precise staging of the lesion [clinical examination, lumbo-pelvic magnetic resonance imaging, expert pathology evaluation allowing definition of the histological type and the presence or absence of vascular emboli, and an evaluation of the patient's potential fertility.

LITERATURE REVIEW

Only cervical cancers smaller than 4 cm in size that do not require adjuvant treatment are oncologically acceptable for fertility-saving treatment. According to some authors, the presence of vascular emboli is not an absolute contraindication to uterine preservation, but it does increase the risk of recurrence by about 10%. A diagnostic cone biopsy has been proposed to improve the specific definition of tumour size and the presence or absence of vascular emboli. Lymph node staging (full nodal dissection or sentinel lymph node biopsy) is performed laparoscopically from the start because lymph node involvement makes fertility-sparing surgery less acceptable oncologically. The selection of one of these techniques is often based on very subjective factors such as the habits of the surgeons who specialise in these techniques and their own beliefs about the advantages of one technique over the others, rather than on principles established by "evidence-based medicine" or well-defined oncological strategic principles. We recently conducted an exhaustive review of the various series

Received: 01-October-22 **Manuscript No:** IPGOCR -23-15449

Editor assigned: 03-October-22 **PreQC No:** IPGOCR -23-15449 (PQ)

Reviewed: 15-October-22 **QC No:** IPGOCR -23-15449 (Q)

Revised: 20-October-22 **Manuscript No:** IPGOCR -23-15449 (R)

Published: 27-October-22 **DOI:** 10.36648/2471-8165.8.10.47

Corresponding author: Amruta Jaiswal, Department of Gynaecology, University of Salerno, Baronissi, Italy; E-mail: amruta.j@yahoo.it

Citation: Jaiswal A (2022) Gynecologic Cancer Surgery and Fertility Preservation. Gynecol Obstet Case Rep. Vol.8 No.10:47.

in the literature in order to better analyse the oncological results of these interventions in terms of fertility.

For cervical cancers smaller than 2 cm without vascular emboli, the oncological need for parametrial resection is debatable. In such cases, a simple trachelectomy or conization could be considered as long as clear resection margins of at least 8 mm ensure oncologic safety. In this case, the risk of recurrence is 0.5%. Nonetheless, because only a small number of cases have been reported with this strategy, cohort studies or additional studies are required before this gesture can be validated for routine use in tumours smaller than 2 cm without vascular emboli.

DISCUSSION

Atypical endometrial hyperplasia and true endometrial cancer are two endometrial histological entities that can jeopardise the patient's subsequent fertility. For atypical endometrial hyperplasia or early endometrial cancer, medical therapy is a viable alternative to traditional extirpative surgery. If strict indications are followed and the patient and her partner are fully informed of the risks and benefits, progestin therapy may be considered. While the carcinogenic risk associated with this approach is not zero, it is very low. To detect recurrence or non-response to treatment, a strict surveillance protocol is required, Fertility-sparing treatment is possible in women of childbearing age with atypical endometrial hyperplasia or stage 1A endometrial carcinoma who want to have a baby. Because these indications occur so infrequently and the stakes are so high, a systematic expert review of pathology slides is recommended. Furthermore, it is recommended that care be centralised to expert centres that offer hysteroscopy, medical treatment, and ART and where patients are entered into a national registry. Non-epithelial ovarian cancers are more common in young women, and their prognosis is generally excellent, even in cases of extra-ovarian disease, due to chemotherapy's high curability. For these lesions, surgery should be as minimally invasive as possible. Non-epithelial tumours are divided into two types: germ cell tumours and stromal sex cord tumours. Preoperative measurement of tumour markers aids in diagnosis and should be routinely ordered in young women with ovarian tumours [1-5].

Dygerminomas, vitelline duct tumours (endodermal sinus or yolk-sac tumours), and mixed subtypes are the most common tumours in this group. The standard treatment for these tumours is BEP chemotherapy (bleomycin, etoposide, cisplatin). Fertility-sparing surgery is the standard of care for young patients. Biopsies of the contralateral ovary are not recommended for non-dysgerminoma tumours as long as it is macroscopically normal. Because there is a 10% chance of occult disease in dysgerminoma, a contralateral ovarian biopsy may be recommended. Granulosa cell, Sertoli-Leydig cell, and thecal cell tumours are the most common subtypes of SSCT. Granulosa tumours are uncommonly bilateral, but they are frequently associated with endometrial hyperplasia or cancer. While systematic biopsies of a macroscopically normal contralateral ovary are not required, uterine curettage should be performed on a regular basis. Early-stage granulosa tumours have a favourable prognosis, allowing young women to consider fertility-saving treatment.

CONCLUSION

For women of reproductive age, the issue of fertility preservation must be addressed from the start of gynaecologic cancer treatment. Fertility-sparing treatment may be recommended in selected patients with early-stage tumours, an excellent prognosis, and no need for adjuvant treatment, as long as strict oncologic oversight is maintained (at least for uterine cancers). In other cases, where the data in the literature is more uncertain, specialised multidisciplinary management (including oncologist, surgeon, gynaecologist, specialised pathologist, radiologist,ART specialist, and psychologist) is absolutely required. Allowing the patient to weigh the cancer risk against her hopes for future pregnancy necessitates careful explanation that fertility-sparing treatment is not always the patient's right, even if she desires it, and that fertility-sparing management is formally contra-indicated if it jeopardises the vital prognosis in cases where carcinological management should be the primary concern.

ACKNOWLEDGEMENT

None.

CONFLICT OF INTEREST

There are no conflicts of interest by author.

REFERENCES

1. Woodward PJ, Sohaey R, Kennedy A, Koeller KK (2005) From the archives of the AFIP: a comprehensive review of fetal tumors with pathologic correlation. Radiographics 25(1):215-242.
2. Cassart M, Bosson N, Garel C, Eurin D, Avni F (2008) Fetal intracranial tumors: a review of 27 cases. Eur radiol 18(10):2060-2066.
3. Feygin T, Khalek N, Moldenhauer JS (2020) Fetal brain, head, and neck tumors: Prenatal imaging and management. Prenat Diagn 40(10):1203-1219.
4. Isaacs Jr HI (2002) Perinatal brain tumors: a review of 250 cases. Pediatr Neurol 27(4):249-261.
5. Louis DN, Perry A, Wesseling P, Brat DJ, Cree IA, et al. (2021) The 2021 WHO classification of tumors of the central nervous system: a summary. Neuro Oncol 23(8):1231-1251.