



Elderly Patients with Gynecological Cancer: Is the Management Individualized?

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Abstract

The change in life expectancy affects the clinical presentation and the prognosis of elderly patients with gynecological cancer. The increase of life expectancy and increased numbers of elderly patients, the healthcare systems have to deal more frequently with patients who are not simply older adults but have also severe comorbidities and physiological, psychological, functional, and social needs that require individualised management. Discussing every individual after detailed assessment in a multidisciplinary meeting is extremely important. Several studies have shown that elderly patients with gynecological malignancies are not treated to the same extent as younger patients and have lower odds of receiving standard care according to the oncological protocols. Individualization of management in these patients could be identified in several studies in the literature showing that increasing age at diagnosis predicts deviation from guidelines for surgical therapy, adjuvant radiotherapy or chemotherapy. The authors performed a literature review to clarify whether there are any changes in the treatment of such patients, and whether their management should be considered to be individualized, depending on their age and comorbidities.

Keywords

female genital tract, gynecological cancer, management, octogenarians, treatment

INTRODUCTION

The definition of the geriatric patient, according to German Society of Geriatrics (DGG), the German Society of Gerontology and Geriatrics (DGGG), and the German Group of Geriatric Institutions (BAG) includes elderly patients over 70 years with multiple comorbidities or over 80 years with signs of frailty.¹ Worldwide there were about 600 million people aged 60 years and over in 2000, while they will be 1.2 billion by 2025 and 2 billion by 2050.^{2,3} Moreover, it has been shown that people who live to ages of 70 to 75 years may be expected to live 14 additional years, while

those who survive to ages of 80 – 85 years, 8 additional years.⁴ Current UK estimates from the Office for National Statistics for male and female life expectancy at birth are 78.2 years and 82.3 years, respectively.⁵ UK life expectancy estimates at the age of 65 are 85.6 years for women and 83 years for men.⁴ A girl born in 2011 has a one-in-three chance of living to her 100th birthday.⁶ However, elderly people face different problems because of their comorbidities; 48% of those aged > 75 have a limiting long-standing illness. According to the latest UK statistics, over two million people over 75 years live alone in UK and 1.5 million of these are women.⁶ Moreover, 58% of the widows (women only) are

aged over 75. Over 60% of the elderly people in the UK agree that there is age discrimination in the daily lives of old people while 52% of them agree that those who plan services do not pay enough attention to the needs of older people.^{4,7,9}

The presence of comorbidities and concomitant medications may interact with treatment or survival of gynecological cancer.¹⁰⁻¹² Moreover, older patients have a higher competing risk of death and life expectancy which is generally limited compared with younger patients. Therefore, relevant study endpoints may vary with age. According to the 2009 UK statistics, the new cases of vulva cancer were 1,157, of vaginal cancer – 258, of cervical cancer – 2,138, of endometrial (uterine) cancer – 7,703, and of ovarian cancer – 6,537 for the year 2008.⁷

AIM

The aims of this study were to review the management of elderly patients with gynecological cancers, to clarify the feasibility and tolerability of surgery in elderly patients, and to identify factors that influence the short- and long-term outcomes.

MATERIALS AND METHODS

We performed a narrative review, searching PubMed and Scopus databases, till May 2019. Inclusion criteria were

every study reporting difference in the management of patients over 80 years old at the time of diagnosis, who were surgically treated for gynecological cancer (vulval, vaginal, cervical, endometrial, salpingeal, ovarian, and peritoneal). In total, we have reviewed 7,171 and 207 articles in PubMed and in Scopus, respectively.

DISCUSSION

Because of the changing in the global demographic pattern regarding the increase of life expectancy and increased numbers of elderly patients, the healthcare systems have to deal more frequently with patients who are not simply older adults but have also severe comorbidities and physiological, psychological, functional, and social needs that require individualised management. Discussing every individual after detailed assessment (**Fig. 1**) in a multidisciplinary meeting (MDM) is extremely important. A patient can be operated on if she is not frail and if she gives her informed consent. It should be mentioned, although not oncologically correct, that different treatment options are offered to these patients including local anesthesia, palliative radiotherapy, carboplatin as single agent, simple vulvectomy, hemivulvectomy or wide local excision of the vulva, levonorgestrel IUS or high-dose progesterone for endometrial cancer. The incidence of the histological types is similar to that of the general population, but a difference is mentioned in the incidence of the different cancers of the genital tract. According to UK statistics, in women over 80 years old, ovarian cancer is the most common followed by endometrial, vulval, cervical, peritoneal, and vaginal cancer.¹³

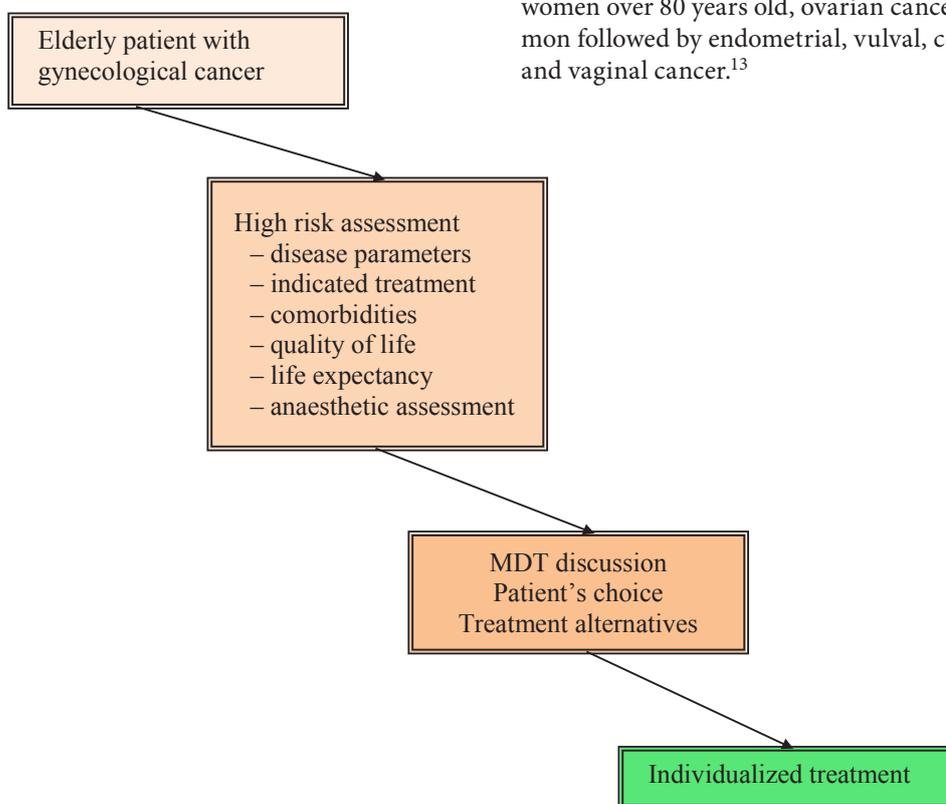


Figure 1. Assessment of elderly patients with gynecological cancers. MDM: multi-disciplinary meeting.

We reviewed the current relevant literature and sub-grouped the main types of cancers in the elderly patients in the following categories: a) vulval, vaginal, and cervical cancer, b) endometrial cancer, and c) ovarian/salpingeal/peritoneal cancer.

Discontinuation of cervical cancer screening is suggested in women aged 65 and older with no increased risk (e.g. no history of high-grade dysplasia or worse) and who have had adequate prior (negative) screening (e.g. three negative Pap tests within the past ten years).¹¹ However, a recently published study has shown that the incidence of cervical cancer does not decrease significantly in older women. Women over the age of 70 are frequently diagnosed with advanced stage disease which limits their treatment options.¹⁴ Cervical screening in elderly patients could also be used to make early diagnosis of vulval or vaginal cancer as it gives a good option for gynecological examination. Cervical cytology could be used as the major method to clarify the presence of malignancy as it is one of the most tolerable types of examination.

Elderly women with cervical cancer are more likely to receive primary radiotherapy, forego treatment or die from their disease. In a previous study, significant difference in treatment options was noted in the elderly group of patients compared to the younger ones even after stratifying by disease stage.² More specifically, 16% of the older patients underwent surgical treatment compared with 54% of the younger patients, while elderly patients were nine times more likely to receive no treatment.¹⁵ Chemoradiotherapy such as weekly carboplatin concurrent with pelvic radiation seems to be better tolerated by elderly patients.¹⁶ By these treatment options, complete response could reach 83.05%, whereas 16.95% of the patients could develop either persistent or progressive disease.¹⁶ The most common side effects of this management are hematological and gastrointestinal.

Although retroperitoneal lymphadenectomy is a fundamental step in the surgical management of patients with endometrial cancer, its applicability to geriatric patients is controversial and questioned. An individualized pathway should be used by weighing the benefits and the risks of such an extensive operation, as there is no clear survival benefit to lymphadenectomy in elderly women presenting with low-grade disease and there is always a higher risk for morbidity. On the other hand, Giannice et al. suggested that pelvic and para-aortic lymphadenectomy could be performed safely in elderly patients aged 70 and over with endometrial and ovarian carcinoma without an increase in morbidity and mortality.¹⁷ For this reason, they suggested that advanced chronologic age alone should not be considered a contraindication to full surgical treatment in these patients.¹⁷ In that study, however, the cohort of patients was much younger and may be with less comorbidities. Moreover, according to Lowery et al. in 5,759 women older than 80, systematic lymphadenectomy was associated with improved disease free survival for high grade tumors, but similar disease free survival for low grade endometrial cancer, consistent with what is seen in younger women.¹⁸

The incidence of ovarian cancer is highest in women over 60 years old. The highest age-specific incidence rates are seen for women aged 80-84 years at diagnosis (69 per 100,000), dropping to 64 per 100,000 in women aged 85 and over.⁸ Elderly ovarian cancer patients often undergo non-optimal surgery due to their age despite of the high risk of recurrence. In the majority of the cases, the patients could have either suboptimal cytoreductive surgery or single agent chemotherapy. Uyar et al. showed that elderly patients had a decreased likelihood of receiving surgery and combination chemotherapy despite equivalent co-morbidities.¹⁹ In that study, optimal surgical cytoreduction had the greatest impact on survival.¹⁹ In other studies, it was also shown that patients over 70 years had less peritoneal surgery especially diaphragmatic surgery, pelvic, and para-aortic lymphadenectomy.²⁰ However, Fotopoulou et al. presented that radical surgery for ovarian cancer obtaining complete tumor resection is associated with a significantly longer overall survival in elderly patients (≥ 70 years).²¹ In the same study, a complete tumor resection was achieved in 44.6% of patients with an associated complication rate of 40.6%.²¹ Until now there have been limited data specifically addressing the issue of elderly patients; however, only selected patients appear to be appropriate candidates for complete debulking surgery. For this reason, Petignat et al. showed that after adjustment for tumor characteristics and treatment, older women still had an 1.8-fold increased risk of dying of ovarian cancer compared to younger, which was partly explained by later diagnosis and suboptimal treatment.²²

Several studies have shown that elderly patients with gynecological malignancies are not treated to the same extent as younger patients and have lower odds of receiving standard care according to the oncological protocols.²³ Individualization of management in these patients could be identified in several studies in the literature showing that increasing age at diagnosis predicts deviation from guidelines for surgical therapy, adjuvant radiotherapy or chemotherapy.²⁴⁻²⁷ In the current authors' opinion, guideline deviation does not necessarily equal inappropriate treatment taking into account the comorbidities, quality of life issues, and the life expectancy. However, others believe that undertreatment could have an impact on patient outcome as it leads to unnecessary disease-specific deaths.²⁸⁻³⁰

According to the International Society of Geriatric Oncology guidelines, advancing age, by itself, is not a reliable guide to treatment decision making. For this reason, detailed evaluation of certain elements of a comprehensive geriatric assessment including performance status, activities of daily living, number and severity of comorbidities, Charlson comorbidity index, socioeconomic conditions, mental status, geriatric depression scale, polypharmacy, nutrition, immobility, impaired vision, and hearing loss could help in treatment decision making during the MDM discussion.³¹ Patient comorbidities, tumor characteristics and remaining life expectancy affect treatment recommendations. The findings could categorize the patient into one

of four groups: healthy, vulnerable, frail, or terminally ill. The guidelines recommend that a patient categorized as healthy or vulnerable (i.e., with reversible problems following geriatric intervention) should receive the same approach to treatment as a younger patient. Frail patients should be managed using adapted treatment strategies, and the terminally ill should receive symptomatic/palliative care only (International Society of Geriatric Oncology guidelines).³¹ Of course, the final treatment decision should always respect the patient's personal preference and fears.

What we have to bear in mind is that an operation does not end in the operating theatre. In order to be successful, close postoperative care is necessary to achieve early mobilization, pain control, and avoid dehydration. Even slightly elevated temperature should raise suspicion of a possible infection in these patients. Moreover, all the care team should have high suspicion of venous thromboembolism symptoms. Physiotherapy consults and home health nursing on discharge is also essential. Volunteers can also be used in order to assist elderly patients in their everyday needs and activities during the first postoperative days.

A question could be raised about who has the right to decide about the possible management. Is it a doctor's, relative's or patient's decision? Who is going to give the informed consent? Doctors should proceed to a good selection of patients that are operable after detailed assessment and patients as well as relatives should be aware of all the possible complications such as infection, hemorrhage, thrombosis, adjacent organ injury or anesthetic risk that could occur in such an elderly patient. In order to proceed to surgery, the side effects and possible risks of operation should outweigh the "wait and watch" policy. Patients with severe comorbidity should be offered palliative care at special nursing homes or at home with specialized care-givers. Although Perri et al. in their retrospective study suggest that optimal management of such patients improve their survival at any age, balancing their comorbidities and postoperative quality of life, their approach should be individualized.³² Mitchell et al., in recent nurse survey revealed that holistic needs assessment is crucial for octogenarians and such a service should be organized in each individual cancer site.³³ We strongly propose a multidisciplinary team approach which could better individualize and support an octogenarian's treatment preoperatively, intraoperatively and postoperatively.

CONCLUSION

We tried to present the management of elderly patients over 85-years-old. This age was used as a cut-off point in order to clarify what occurs in the management of the elderly. One of the limitations of this study is the fact that the authors have limited data regarding the prognosis of those patients.

Conflict of Interest

No conflict of interest was declared by the authors.

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Пациенты пожилого возраста с гинекологическим раком: индивидуализировано ли ведение?

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Резюме

Изменение ожидаемой продолжительности жизни влияет на клиническую картину и прогноз у пациентов пожилого возраста с гинекологическим раком. Увеличение продолжительности жизни и увеличение числа пациентов пожилого возраста означает, что системы медицинского страхования будут чаще иметь дело не просто с пациентами пожилого возраста, но с такими, которые имеют тяжёлые сопутствующие заболевания и физиологические, психологические, функциональные и социальные потребности, которые требуют индивидуального подхода. Обсуждение каждого отдельного случая после детальной оценки в мультифункциональной группе врачей чрезвычайно важно. В ряде исследований установлено, что пожилые пациенты с гинекологическими злокачественными новообразованиями не лечатся в той же степени, что и более молодые пациенты, и имеют более низкую частоту оказания стандартной помощи в соответствии с онкологическими протоколами. Индивидуальный подход к этим пациентам может быть установлен в ряде исследований в обозреваемой нами литературе, которые показывают, что преклонный возраст при постановке диагноза является показателем отклонения от руководящих принципов хирургического лечения, адъювантной лучевой терапии или химиотерапии. Авторы рассмотрели литературу, чтобы выяснить, есть ли какие-либо изменения в лечении таких пациентов и следует ли рассматривать их лечение индивидуально в соответствии с их возрастом и сопутствующими заболеваниями.

Ключевые слова

женская репродуктивная система, гинекологический рак, контроль состояния, пациенты восьмидесятилетнего возраста, лечение
