

# Elderly patients with gynaecological cancer: is the management individualized?

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## Summary

The change in life expectancy affects the presentation and the prognosis of elderly patients with gynaecological cancer. The authors performed a literature review in order to clarify if there are any changes in the treatment of such patients, and if their management should be considered to be individualized, depending on their age and comorbidities.

*Key words:* Octogenitarians; Cancer; Female genital tract; Treatment options.

## Introduction

An exact definition of the geriatric patient is not available in the current literature [1] and the cut off age differs and may be 60, 65, or 70 years while some studies place it around 80 years [2]. Worldwide there were about 600 million people with more than 60 years in 2000, while in 2025 they will reach 1.2 billion and 2 billion in 2050. 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 to 85 years, 8 additional years [3]. Current UK estimates from the Office for National Statistics for female life expectancy at birth are 82.3 years and 78.2 years for men [4]. UK life expectancy estimates at the age of 65 are 85.6 years for women and 83 years for men [3]. A baby girl born in 2011 has a one in three chance of living to 100 [4]. However, elderly people face different problems because of their comorbidities; 48% of those aged > 75 have a limiting long-standing illness. According to latest UK statistics, over two million people over 75 years live alone in UK and 1.5 million of these are women [5]. Moreover, 58% of widows (women only) are aged over 75. Over 60% of older people in the UK agree that age discrimination exists in the daily lives of older people while 52% of older people agree that those who plan services do not pay enough attention to the needs of older people [3, 6, 8].

The presence of comorbidities and concomitant medications may interact with treatment or survival of gynecol-

ogical cancer [8-10]. 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 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 [6].

The aims of this study are to review the management of the oldest of the elderly with gynaecological 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

This is a narrative review. Inclusion criteria were every study presenting the difference in the management of patients over 85-years-old at the time of diagnosis, who were surgically treated for gynaecological cancer (vulval, vaginal, cervical, endometrial, salpingeal, ovarian, and peritoneal).

## 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 these patients who are not simply older adults but have also difficult comorbidities, as

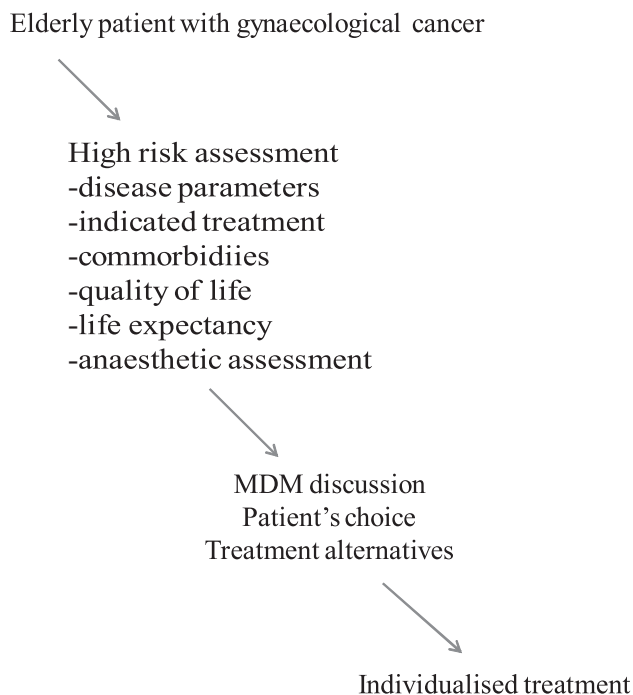


Figure 1. — Assessment of elderly patients with gynaecological cancers.

well as physiological, psychological, functional, and social needs that require individualised management. The role of discussing every individual after detailed assessment (Figure 1) in the multidisciplinary meeting (MDM) is extremely significant. The patient can be operated if she is not frail and if she gives her informed consent. It should be mentioned that - although not oncologically correct - 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 with 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 older than 80 years, ovarian cancer is the most common followed by endometrial, vulval, cervical, peritoneal, and vaginal cancer.

The current authors reviewed the current literature on the field and they subgrouped the main cancers of the eldest 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 [11] 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). However, a

recently published study showed 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 [12]. Cervical screening in elderly patients could also be used for the early diagnosis of vulval or vaginal cancer as it gives a good option for gynaecological examination. Cervical cytology could be used as the main 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 [13]. 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 [13]. Chemoradiotherapy such as weekly carboplatin concurrent with pelvic radiation seems to be better tolerated from elderly patients [14]. By these treatment options, complete response could reach 83.05 %, whereas 16.95% of the patients could develop either persistent or progressive disease [14]. 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 age  $\geq 70$  years with endometrial and ovarian carcinoma without an increase in morbidity and mortality [15]. For this reason, they suggested that advanced chronologic age alone should not be considered a contraindication to full surgical treatment in these patients [15]. However, in that study the cohort of the 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 [16].

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 [7]. 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 the eldest had a decreased likelihood of receiving surgery and combination chemotherapy despite equivalent co-morbidities [17]. In that study, optimal surgical cytoreduction had the greatest impact on survival [17]. In other studies, it was also shown that patients over 70 years had less peritoneal surgery especially diaphragmatic surgery, pelvic, and para-aortic lymphadenectomy [18]. However, Fotopoulou *et al.* presented that radical surgery for ovarian cancer obtaining complete tumor resection is associated with a significantly prolonged overall survival in elderly patients ( $\geq 70$  years) [19]. In the same study, a complete tumor resection was achieved in 44.6% of patients with an associated complication rate of 40.6% [19]. Until now there are limited data specifically addressing the eldest; 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 a 1.8-fold increased risk of dying of ovarian cancer compared to younger, which was partly explained by later diagnosis and suboptimal treatment [20].

Several studies have shown that the eldest with gynaecological malignancies are not treated to the same extent as younger patients and have lower odds of receiving standard care according to the oncological protocols [21]. 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 [22-25]. 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 [26-28].

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 [29]. 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 in-

tervention) 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) [30]. 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 is not finishing in the theatre. In order to be successful, close postoperative care is necessary to achieve early mobilization, pain control, and avoid dehydration. Even slightly raised temperature should raise suspicion of 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 the eldest in 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 anaesthetic 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 heavy comorbidity should be offered palliative care at special nursing homes or at home with specialized care-givers.

## Conclusion

The current authors 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 is occurring in the management of the eldest. One of the limitations of this study is the fact that the authors have limited data regarding the prognosis of those patients.

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