Chapter

Palliative Care in Gynaecological Oncology

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Abstract

Palliative care in gynaecologic oncology focuses on specific and severe symptoms resulting from affected abdominal and pelvic organs and feminine genitals. These symptoms are mainly connected to advanced gynaecologic malignancies. Patients with locally advanced or recurrent gynaecologic cancers may present with various symptoms. Among those we discuss vaginal bleeding, vaginal discharge and fistulas. Vice versa non-malignant diseases and non-pelvic site diseases such as inflammations, overdose of anticoagulants, wounds or pressure ulcers may have similar clinical manifestation. Some symptoms may result from aggressive cancer treatment (oncological surgery, radiotherapy) with curative intent. Some symptoms get worse on account of the postmenopausal status (natural or artificial following any type of ovarian failure). For advanced gynae-oncological diseases it has been in practise, that the best palliative care is offered and practised simultaneously with curative treatment. The problematics of gynaecologic symptoms in palliative care represents delicate and intimate sphere and it may disturb patient's autonomy and dignity. The mission of physicians, nurses and caregivers is to consider treatment options thoroughly in context of patient's quality of life, prognosis and life conditions to fulfil the ideals of the best symptomatic and supportive care.

Keywords: gynaecologic malignancies, vaginal bleeding, fistula, vaginal packing, embolisation

1. Introduction

Our contribution to the open access book of palliative care focuses on specific and severe symptoms resulting from affected abdominal and pelvic organs and feminine genitals. These symptoms are mainly connected to advanced gynaecologic malignancies. Patients with locally advanced or recurrent gynaecologic cancers may present with various symptoms. Among those we discuss vaginal bleeding, vaginal discharge and fistulas. Problematics of pain control, oedema and ascites, nausea and vomiting, shortness of breath and malignant bowel obstruction is common to most incurable advanced diseases and these are not connected to pelvic diseases only, see specific chapters. Vice versa non-malignant diseases and non-pelvic site diseases such as inflammations, overdose of anticoagulants, wounds or pressure ulcers may have similar clinical manifestation. Some symptoms may result from aggressive cancer treatment (oncological surgery, radiotherapy) with curative intent. Some symptoms get worse on account of the postmenopausal status (natural or artificial following any type of ovarian failure). For advanced gynae-oncological diseases it has been in practise, that the best palliative care is

offered and practised simultaneously with curative treatment. Optimum palliative care can only be provided by a team that may include a gynaecologic oncologist, a radiation oncologist, an interventional radiologist, a palliative care physician, nurse and a social worker to address the various problems faced by these patients [1, 2]. All described clinical situations can be well solved in hospices as well as at patient's home with the guidance of experienced mobile palliative care teams. Except for malignant bowel obstruction and severe genital bleeding, which both present extreme mental and physical load for the caregivers who witness it and it can be traumatizing experience for unprepared family members and healthcare providers.

2. Genital bleeding

Vaginal bleeding or discharge is the most common presenting symptom of advanced or recurrent gynaecologic malignancy. Patients may initially ignore bleeding if it is minimal and potentially attributable to menses. However, direct invasion of blood vessels by tumour may come to cause massive bleeding. If it is beneficial for the patient, the source of the bleeding should be determined and solved according to the possibilities (see **Table 1**). By that we mean no painful and stressing diagnostic procedures with preterminal and terminal patients. Initial management of pathologic vaginal bleeding requires a proper gynaecologic examination and considerations of placement of tight vaginal packing with haemodynamic support [1, 2]. The packing should be left in place for 24–48 hours maximum and then it must be extracted or replaced. Tight packing requires insertion of urinary catheter, because of urethral obstruction caused by packing. Prolonged packing in risky for severe inflammatory complications and fistula formation.

The aspect to consider is quality of life (relief of symptoms of anaemia versus reasonable and ethical protraction of suffering in conditions of incurable terminal status). Severe unaffected haemorrhage as the final event is really traumatizing for witnessing family members [1]. It should be well communicated in advance and if family members or caregivers do not feel comfortable with this situation, then it is better to evaluate the option of hospitalization in hospice.

In case of clinical status unresponsive to aggressive intervention, in exhausted terminal patients with severe uncontrollable vaginal haemorrhage, palliative sedation is an ethically and morally appropriate option [3].

In all other cases that are not regarded as terminal phase of incurable disease, it is useful to try to affect blood loss. Mucosal haemorrhage usually does not have any haemodynamic impact and it is rather an annoying symptom. Often it becomes a side effect of anticoagulation as a prevention of thromboembolic event in advanced oncologic disease. In that case it should be balanced which situation is more comfortable for the patient (mucosal bleeding or risk of thromboembolism). The same type of mucosal bleeding is typical for radiotherapeutic toxicity (early and late onset effect) especially in combination with postmenopausal atrophy of the affected tissues. Also, any type of inflammation of atrophic mucosa may lead to mucosal haemorrhage. Frequent showering, rinsing or irrigating with disinfectant solutions (betadine solution of maximum 10% concentration, chlorhexidine solution in commercially available remedies) is useful for both cases of mucosal bleeding, as well as trophy supporting creams (containing vitamin E). We highly recommend patient, family members and caregivers to pay attention to the best possible hygiene and skincare of genitals and frequent replacement of incontinence aids (pads, panties, diapers).

Source of haemorrhage	Possible etiology	Options for treatment
Vulvar bleeding	Inflammation in the conditions of atrophic skin and mucosa. Pressure ulcers Malignant and non - malignant tumours	Antibiotic/antimycotic ointment, frequent showering. For bleeding ulcers topical adrenalin, Monsel solution, and pressure bandage. Palliative radiotherapy in malignant affections
Vaginal bleeding	Vaginal, cervical and uterine malignant tumours of primary and secondary origin. Fistulas vesico- and recto/entero-vaginal. Overdosing of anticoagulants. Atrophic mucosa in combination with inflammation or post - radiotherapeutic status.	First aid method – vaginal packing. For cervical and pelvic tumours interventional radiology – based embolization. Evaluation of anticoagulant therapy, adjustments of the dosage in the case of palliative approach. External radiotherapy (brachy–/external)
Urethral bleeding	Urinary inflammation Fistulas Bladder infiltration Post- radiotherapeutic atrophic mucosa Overdosing of anticoagulants	Antibiotics and anti-inflammatory drugs External palliative radiotherapy in bladder infilration Urinary catheters and antifibrinolytic drugs (tranexamic acid) intravenously or orally in case of radiotherapy-related bleeding. Percutaneous nephrostomy tubes bilaterally in fistulas Suprapubic catheter in urethral damage (surgical, tumorous)
Anal bleeding	Haemorrhoidal affections with combination of inflammatory complications. Malignant tumours of gastrointestinal and of metastatic origin. Fistulas Overdosing of anticoagulants Atrophy Radiotherapy related mucosal affections	For external annal affections of different origin: topical adrenalin, Monsel solution and packing. Anti-inflammatory suppositories and ointments. Pelvic external palliative radiotherapy for tumours in pelvis Anticoagulant drugs administered orally or intravenously

Table 1.
Sources of bleeding, possible origin and treatment options.

Bleeding from tumour surfaces or as a consequence of direct invasion of blood vessels usually represents a stressful situation. It may lead to hypotension, tachycardia, shortness of breath and disorders of consciousness. If it is in the patient's interest, and it does not interfere with quality - of life approach, it is possible to try to affect this type of bleeding by interventional radiology- based embolization (occlusion of the vessels that are supplying the anatomic sites of uncontrolled bleeding - internal iliac arteries via femoral artery) [1, 2, 4]. In theory, the same procedure can be managed by open surgery or laparoscopically by ligation of internal iliac arteries. Profit of such a risky step is questionable (aspects of the surgery - wounds, additional blood loss, anaesthesia). The effect of internal iliac obstruction comes almost immediately, in hours and days we can observe decrease in blood loss.

Other option how to reduce vessel bleeding is palliative radiotherapy (external beam radiation therapy -EBRT and/or in combination with brachytherapy). The effect of irradiation evolves in days and week. A summary of literature suggests that the most commonly described fractionation scheme for these patients is 10Gy repeated at one-month intervals to a total of 30Gy as clinical circumstances dictate

and tolerance of the dosing allows. Patients who receive all 3 fractions have superior outcomes compared to those who do not, though those with the longest survival often face a recurrence of their local symptoms and an increased incidence of severe toxicity. It is therefore prudent to consider a lower dose-per-fraction for patients who may survive 10 to 12 months, or longer [2].

The duration of the effect of both mentioned procedures (interventional radiologist occlusion and palliative radiotherapy) depends on many factors (the progression rate of oncologic disease, coexistence of other comorbidities and the overall clinical status of the frail palliative patient).

If symptomatic anaemia occurs, it is a matter of discussion whether the treatment with blood transfusion is convenient. The benefits and disadvantages must be thoroughly evaluated, including economic aspects and availability of blood derivatives. Blood transfusion is questionable in the situation where severe bleeding occurs with incurable progressive disease. According to the World Health Organisation (WHO) defines palliative care as a care that affirms life and regards dying as a natural process and intends neither to hasten nor postpone death. It also emphasizes impeccable assessment as essential for effective management [5].

Regardless of the context of the patient's prognosis, quality of life and living conditions we always recommend: liquids orally or parenterally, parenteral antifibrinolytic medication if available, oxygen therapy, anxiolytic medication, morphine in the case of shortness of breath, and all other care known as the best symptomatic and supportive.

3. Fistulas

By the term fistula we mean pathologic communication between neighbouring organs, that does not normally (in conditions of healthy organism) exist. In patients with advanced progressive oncological diseases of pelvis, in patients after radical surgery +/– radiotherapy we often see vesico-vaginal and/or recto(entero-)vaginal fistulas as a consequence of super – radical curative approach. The presence of fistula leads to vaginal discharge, bleeding and develops to absolute urine and /or faecal incontinence. This problem has many aspects (physical, psychological, social, ethical), it has an overlap to the patient integrity and autonomy, especially concerning women, mothers – the pillars of the families. This situation requires a delicate approach of the family members and caregivers. For treatment options see **Table 2**.

Because of all the above-mentioned overlaps of this upsetting symptom, the surgical intervention comes always first. Surgical approach in not recommended only if the patient's condition is poor and would not have any contributions to the quality of life by means of harm and stress It makes sense to solve fistulas and prevent

Type of fistula	Patient capable of surgical intervention	Patient uncapable of surgical intervention
Vesico - vaginal	Abdominal/vaginal approach and reconstructive surgery	Bilateral nephrostomy Urinary catheter, suprapubic catheter – partial relief Continuous use of incontinence aids (pads, panties, diapers)
Recto - vaginal	colostomy	Incontinent aids
Entero - vaginal	Enterostomy (small bowel)	Incontinent aids

Table 2.
Types of fistulas and treatment options in palliative patients.

absolute incontinence even with immobile patients in otherwise good condition and low comorbidities.

In situations where fistulas cannot be bypassed, we stress again to focus on the hygiene and skincare (frequent change of incontinence pads, panties and diapers), showering genitals, disinfectant solutions (diluted betadine solution) rinsing and irrigating. Additionally, we recommend protective nutritive creams to prevent inflammation and pressure ulcers. Even when enterostomy or colostomy was constructed, some discharge from anus and/or vagina can appear, then the above mentioned also applies. The problem of the acidic intestinal content is, that it gets painful in contact with vaginal mucosa in contrast to urine, that is weakly acidic or neutral and usually does not cause any pain. Thus, with faecal incontinence good pain relief is required. If the construction of stomy is not possible and we deal with the situation of a terminal patient with poor prognosis the restriction in alimentation (feeding and eating) comes in question. Vice versa in case of a patient incapable of surgical procedure but not in preterminal nor terminal status, parenteral nutrition should be considered. Otherwise, parenteral nutrition precedes surgical treatment at least for several days for the purpose to reduce the bowel content.

As for the comfort of the patient and the caregivers we recommend air washers, aroma diffusers, fanning or other air fresheners.

4. Vaginal discharge

Most of the causes of vaginal discharge in palliative patients were discussed in previous paragraphs. Evaluation of new discharge is always warning as it may stand for fungal or bacterial infection, which can be treated in the same way as in common gynaecology practise with local disinfectants, antibiotics and antimycotics, together with good hygiene and probiotic supplementation to reinstall the normal

Type of discharge	Etiology	Treatment options
Inflammatory - purulent	Vulvar, vaginal, urinary infection Tumour growth	Disinfectant solutions (10% betadine solution, chlorohexidine solution et.)
Mycotic	Dysmicrobia of genitalia In diabetic and immobile patients	Antimycotics – suppositories, ointments, creams together with probiotics and frequent hygiene by showering and rinsing (including above mentioned disinfectants)
Watery - clear	Urinary infection Urine incontinence Vesico-vaginal fistula Ascites leak Lymph leak	Antibiotics in infection Urinary catheters, suprapubic catheters, surgical approach Paracentesis for ascites derivation Hygiene and skincare
With blood content	Severe inflammation Atrophic mucosa Post radiotherapy Fistulas Tumour growth	Disinfectants, nutritive and protective creams Surgery in fistulas if possible Antifibrinolytics in medication Vaginal packing in tumour bleeding
With faecal content	Fistulas Faecal incontinence	Surgical approach and/or best hygiene and skincare

Table 3.
Types of vaginal discharge, etiology and treatment options in palliative patients.

microbial environment of vagina [1]. In those cases where the discharge represents disease progression (in addition with bleeding and fistulas), a plan for hygiene and for treatment options has to be collaboratively developed (considering surgery procedures, conservative approach, pain relief etc.). See **Table 3**.

5. Conclusion

The problematics of gynaecologic symptoms in palliative care that we discussed represents delicate and intimate sphere and it may disturb patient's autonomy and dignity. The mission of physicians, nurses and caregivers is to consider treatment options thoroughly in context of patient's quality of life, prognosis and life conditions to fulfil the ideals of the best symptomatic and supportive care.

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Conflict of interest

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