

Palliative care

MC van Aardt

Gynaecologic Oncology Subspecialist, Department of Obstetrics and Gynaecology, University of Pretoria, Pretoria, South Africa

Introduction

The World Health Organisation (WHO) defines palliative care as care aimed at improving the quality of life of patients and their families confronted with the challenges associated with a terminal illness, by way of preventing and relieving suffering through early recognition and dealing with physical, psychosocial and spiritual difficulties. The current WHO definition is given in Box 1.¹

While care provided by hospice is regarded as palliative care, not all palliative care provided is in a hospice. Palliative care can be delivered to patients at any point during the course of a life-threatening illness, even simultaneous with curative or life-prolonging therapies.² Palliative care can be offered in any setting and is not dependant on high-level equipment, classy buildings or technology.³

Evidence to support palliative care

A review published in 2011 found that palliative care interventions enhanced patients' quality of life, satisfaction of care and end-of-life outcomes.⁴ A randomised trial published in 2010 showed significant improvement in quality of life, mood and longer survival in patients receiving early integration of palliative care.⁵ Based on a number of trials, including nine randomised-control trials (RCT), the American Society of Clinical Oncology (ASCO) updated their clinical practice guidelines in 2017. The recommendation currently is that patients with advanced cancer should receive palliative care early in the course of the disease, simultaneously with active treatment.⁶

Objectives of high quality palliative care

Good quality palliative care is intended to uphold the patient's quality of life by means of a multidimensional and holistic approach that is aimed at controlling the symptoms from the evolving disease and side effects from the primary treatment.⁷ Palliative care can be defined into three different phases: (1) *Disease-oriented palliation*: when the disease is incurable, symptoms related to disease progression can be managed with disease-targeted

therapy. (2) *Symptom-orientated palliation*: during this phase the symptoms are no longer relieved by disease-targeting therapy or the oriented treatment results in more harm than good. Quality of life is being preserved through directing care towards maximum symptom control. (3) *Terminal (or end-of-life) care*: the patient will rely on basic function of life during this phase. Palliative care during this phase is directed at ensuring a quality of dying by optimising symptom control, especially during the final hours of life. Proper palliative care does not end when the patient dies but continues with assisting family and relatives in their bereavement.⁷

Symptom management in palliative care

Patients diagnosed with advanced gynaecological cancer suffer from many symptoms resulting from both the primary disease and the treatment. These symptoms include vaginal bleeding, pain, nausea, vomiting, bowel dysfunction, fatigue, depressed mood, anxiety, anorexia, wasting and lymphedema.⁸

Box 1: WHO Definition of Palliative Care¹

Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.

Palliative care:

- provides relief from pain and other distressing symptoms;
- affirms life and regards dying as a normal process;
- intends neither to hasten or postpone death;
- integrates the psychological and spiritual aspects of patient care;
- offers a support system to help patients live as actively as possible until death;
- offers a support system to help the family cope during the patients illness and in their own bereavement;
- uses a team approach to address the needs of patients and their families, including bereavement counselling, if indicated;
- will enhance quality of life, and may also positively influence the course of illness;
- is applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life, such as chemotherapy or radiation therapy, and includes those investigations needed to better understand and manage distressing clinical complications.

Correspondence

MC van Aardt
email: mc@vanaardt.net

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Young patients receiving active treatment or patients with a previous history of chronic pain, depression or anxiety has an increased risk of high symptom burden.⁹ As patients near the end-of-life, there is an increase in sleepiness, anorexia, fatigue and a feeling of being unwell. These symptoms are present in at least 70% of patients in their final week of life.¹⁰ Symptoms that the general gynaecologist will most often be faced with include pain, nausea and depression.⁸ Box 2 highlights some useful guidelines for symptom management.⁸

Box 2: Useful tips for symptom management⁸

- History is crucial – proper symptom assessment is essential for proper symptom management
- Identify the cause – attempts to find and treat the etiology of the symptom rather than treating different etiologies of a specific symptom the same
- Constant symptoms – treat with scheduled medication (not 'as needed')
- Severe symptoms – if two different medications are required to control a symptom, one drug should be scheduled and the other drug 'as needed'

Pain

Pain can cause severe disability in patients with advanced cancer. The aim of adequate pain management should be to optimise the patient's daily functioning while at the same time minimising side effects from analgesia. Pain is most often secondary to nerve, muscle and/or bone infiltration but pain due to oncologic emergencies, like fractures, nervous system metastases, acute abdomen or systemic infection, should be excluded before prescribing opioid analgesia.^{11,12}

Mild pain can most often be treated with medication other than opioids, including paracetamol and nonsteroidal anti-inflammatory drugs. In patients suffering from moderate-to-severe pain more aggressive treatment is required and includes opioid medication, steroids, antidepressants, anticonvulsants and procedural interventions.⁸

It is important to follow certain basic principles when prescribing and titrating opioids. When prescribing short-acting opioid to be used 'as needed' it should be taken every 3-4 hours. A long-acting opioid, if required, should comprise approximately two thirds of the total daily opioid dose and the dose of the short-acting opioid used for breakthrough pain around 10-15% of the long-acting opioid dose. Patients experiencing severe acute pain are best managed with intravenous opioid boluses. Patients are reviewed every 15 minutes and if the pain is not adequately controlled, in the absence of prohibitive side effects, the dose is increased by 50-100% until pain control is achieved.⁸

Additional treatments like transdermal electrical nerve stimulation (TENS), massage therapy and other

biofeedback techniques may be helpful add-ons to narcotic medication. In patients experiencing regional pain and considerable side effects from systemic opioid therapy, epidural analgesia may offer significant benefit. In select patients, interventional procedures like neurodestructive techniques may provide some relief, for example blocking the hypogastric plexus for refractory pelvic pain.¹¹

Nausea and vomiting

Nausea and vomiting can be the result of a large number of causes ranging from disease progression to the result of treatment.¹¹ Treatment of nausea and vomiting should target the underlying mechanism. A mnemonic that can assist in diagnosing the underlying cause is VOMIT - Vestibular apparatus, Obstruction, Mobility/Mind, Infection/Inflammation and Toxin/Tumour.⁸

Nausea associated with the *vestibular apparatus* is generally related to movement and can be treated with promethazine, scopolamine or antihistamines. Nausea resulting from obstruction can be due to mechanical (malignant obstruction) or functional (constipation) *obstruction* and is caused by stimulation of mechanical- and chemoreceptors. Non-obstructing carcinomatosis can lead to *mobility-related* nausea for which metoclopramide and other prokinetic drugs work best.⁸

Mind-associated nausea is linked to emotion or memory. Benzodiazepines might be of value in these patients. Nausea secondary to *infection* should be addressed by treating the underlying infection. *Toxin-associated* nausea is most often caused by chemotherapy. As chemotherapy stimulates serotonin-mediated chemoreceptors, it is treated most effectively with serotonin antagonists like ondansetron or granisetron. A single antiemetic is prescribed initially to control nausea but a second agent from a different class should be added if insufficient to control symptoms.⁸

Vaginal bleeding and discharge

Vaginal bleeding is common in women with advanced cervical, endometrial and vaginal cancer. Bleeding can be managed by tight aseptic vaginal packing, placed with the patient in lithotomy and using a speculum to expose the upper vagina. A urinary catheter should be inserted as the pack can compress the urethra leading to urinary retention. Patients should also be covered with a broad-spectrum antibiotic and metronidazole. Tranexamic acid should also be given at 10mg/kg, three to four times daily. Other methods to control excessive vaginal haemorrhage include hemostatic radiation, uterine artery embolization or surgical ligation of pelvic vessels. Bleeding occurring during the final hours of life should be treated with only sedation and the patient's family provided with the necessary support.^{11,13}

Vaginal discharge in patients with advanced

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disease is usually due to infection of necrotic tumour. Frequent sitz baths with water and antiseptic solution might help to reduce the odour as well as systemic metronidazole and other antibiotics.¹¹

Mood

Majority of patients diagnosed with a terminal illness will have feelings of anxiety and depression and emotional and psychosocial support is critical.⁸ Anxiety and depression should be diagnosed early as it may hamper pain control and treatment compliance if not recognised. Patients at danger of anxiety/depression may have difficulty sleeping, lacking concentration, feelings of anger and loss of control, and constant worrying about illness and death.¹¹

Cognitive-behavioural therapy, mindfulness-based stress reduction, supportive-expressive psychotherapy and relaxation training all have value in the non-pharmacological treatment of anxiety and/or depression in patients with cancer. Pharmacological agents include tricyclic antidepressants, selective serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors. There is no good evidence to support any drug above another in these patients and factors like onset or action, side effects and interactions with other medication might dictate the medication prescribed.⁸

Lymphedema

Lymphedema is the abnormal collection of lymph fluid beneath the skin and subcutaneous tissue, causing limb swelling, irreversible skin changes and cellulitis. Lymphedema is a diagnosis of exclusion and severe lower limb swelling might be due to a large obstructing tumour, deep vein thrombosis or secondary to severe hypoproteinaemia. Treatment generally entails symptomatic relief through graded compression stockings, elevation of the affected limb, diuretics and preventing secondary cellulitis.¹³

Deep vein thrombosis

Deep vein thrombosis is a major contributor to morbidity and mortality in gynaecological malignancies.¹³ Evidence supports the use of low molecular heparin rather than Warfarin in cancer patients due to better efficacy and safety profile.¹⁴ The use of continued anticoagulation in terminal ill patients with limited life expectancy is debatable as some patients may find regular injections problematic and distressing. Cessation of anticoagulation should be individualised accounting for specific treatment goals.¹¹ Many patients with advanced gynaecological malignancies suffer from vaginal bleeding that can be exacerbated by anticoagulation. In these patients and where anticoagulation is contra-indicated, vena cava filters may be considered to prevent pulmonary emboli.¹¹

Ascites

Recurrent malignant ascites is common in patient with advanced ovarian and endometrial cancer causing pain, early satiety, vomiting, tiredness and dyspnoea.¹¹ Options to relief discomfort associated with ascites include peritoneovenous shunts, paracentesis and diuretics.¹³ Diuretics have a limited role in treating patients with malignant ascites and it is most often treated by regular drainage. In select patients a Tenckhoff catheter or other draining devices can be placed to enable patients to drain the ascites at home. Repeated drainage of ascites can lead to hypoalbuminaemia, infections, peritonitis and hypotension.¹³

Pleural effusion

Pleural effusion frequently complicates patients with advanced gynaecological cancers, especially end-stage ovarian cancer. Respiratory distress is best relieved by drainage of pleural fluid.¹³ Some patients may benefit from pleurodesis with talc, bleomycin or tetracycline. Alternatively an indwelling pleural catheter can be inserted, allowing drainage of effusions out-of-hospital.¹¹ One RCT found no difference between using permanent pleural catheters and talc pleurodesis in managing respiratory distress.¹⁵

Anorexia

Anorexia is most often associated with bowel obstruction or ascites and might be relieved by addressing the underlying problem. Megestrol acetate or steroids can sometimes improve appetite, and short-term parental nutrition might pose same benefit perioperative after relieving bowel obstruction. Anorexia is often encountered during the end-stages of cancer and relatives should be counselled regarding natural course of the disease and that by withdrawing nutritional support might provide symptomatic relief in certain patients. Dry mouth may be alleviated by mouth care and small amounts of fluid.¹¹

Constipation

Constipation may result from motility disturbances caused by extensive carcinomatosis or as a side effect of opioid analgesia. Patients may benefit from adding fibre, colonic stimulants and laxatives to their daily routine. Impaction and intestinal obstruction should be excluded before treating constipation. Glycerine suppositories or enemas are generally used for patients with impaction.^{11,12}

Constipation is initially treated with a stool softener, with or without a stimulant laxative. Dosage should be titrated to achieve a soft bowel movement every 24-48 hours. In patients with refractory constipation, other agents can be added including bisacodyl, polyethylene glycol, lactulose, sorbitol, magnesium hydroxide or magnesium citrate.

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Methylnaltrexone, a peripheral working MU opioid receptor blocker may be useful in managing narcotic associated constipation.^{11,12}

Role of surgical intervention in palliative care

Malignant bowel obstruction

Treatment generally changes from curative to palliative when patients present with malignant bowel obstruction. As a result of luminal distension, patients generally present with nausea and vomiting as well as colicky or constant pain. Bowel obstruction can arise from the small or large bowel or both (15% of patients) and result in either partial or total luminal occlusion.¹⁶

Treatment of bowel obstruction is usually conservative and includes limiting oral intake, intravenous fluids and nasogastric decompression. Once these measures fail palliative surgery is considered if it will improve the patients quality of life. Patients better suited for surgery will be those patients capable of recovering physically, regain bowel function and tolerate oral intake after surgery. For patients not fulfilling these criteria, less invasive interventions include percutaneous gastrostomy tubes, large bowel stents for isolated obstructions and pharmacological treatment by way of narcotics, anticholinergics and antiemetics.¹⁶

In patients with small bowel obstruction, the main aim of palliative surgery is to relieve the obstruction through either resection or bypass. Large bowel obstruction should be excluded pre-operatively through a gastrografin enema or CT scan with rectal contrast. Healthy areas of bowel should be used to perform an anastomosis or to create an ostomy. In patients where this is not possible due to extensive disease or widespread mesenteric involvement, a gastrostomy tube should be inserted. A diverting colostomy is generally performed in patients diagnosed with large bowel obstruction, but resection might be attempted in selected patients. Around 30% of patients will experience major complications like enterocutaneous fistulas, anastomotic breakdown, short bowel syndrome and sepsis.¹⁶

Vesicovaginal and rectovaginal fistula

Locally advanced cervical and endometrial cancer can infiltrate the bladder or rectum leading to a vesicovaginal and/or rectovaginal fistula. Fistulas can have a deleterious impact on quality of life due to constant malodour and discomfort, leading to partial or complete social withdrawal.¹¹ In patients with a reasonable life expectancy and functional status diverting procedures can be considered. In patients suffering from vesicovaginal fistulas an ureterointestinal conduit (Bricker ileostomy) or bilateral percutaneous nephrostomies can be offered. Although nephrostomy insertion is a less invasive procedure than surgical diversion, the risk of infection is higher and frequent replacement might be needed. A diverting colostomy might be an option in suitable

patients with rectovaginal fistulas.¹¹ Terminally ill patients not suitable for intervention should be treated with diapers, catheters and absorptive dressings.¹³

Uraemia secondary to ureteric obstruction

Uraemia is a common cause of death in patients with end-stage cervical cancer. Although relieving obstruction and improving uraemia by percutaneous nephrostomies or ureteral stenting, it may potentially prolong the patient's pain and suffering. The advantages and disadvantages of these interventions should be clearly discussed with the family and patient if possible.¹¹

Palliative pelvic exenteration

Pelvic exenteration is the most radical procedure with the highest morbidity performed in gynaecologic oncology. A complete exenteration involves removal of all pelvic organs, creating urinary conduit, a colostomy for stool and reconstruction of the pelvic floor. The most common complications include excessive haemorrhage wound infection and dehiscence, urinary and intestinal fistulas, leakage and obstruction, and pulmonary embolism.¹⁶

There is no generally accepted definition or indication for palliative exenteration. The main purpose of these procedures is to reduce suffering and not to prolong survival.¹⁶ Some patients may not live long enough to benefit from an extensive procedure with recovering times of up to 6 months, however, some studies reported an improvement in quality of life following palliative exenteration in 67-90% of patients.^{17,18}

Identifying the dying patient

Identifying a patient that is starting the dying or terminal stage of their illness is crucial as majority of patients

Box 3: Identifying the dying patient^{2,19}

- Intensive increasing weakness
- Bedridden
- Sleeping majority of the time
- Disinterest in food and fluids
- Struggling to swallow
- Disorientation to time, with inability to concentrate
- Falling blood pressure unrelated to hypovolemia, with rising, weak pulse
- Urinary incontinence or retention due to weakness
- Low urine output
- Unable to close eyes
- Hallucinations involving previously deceased significant individuals
- Allusions to going home or similar themes
- Breathing rate and pattern changes (Cheyne-Stokes breathing, apneas)
- Noisy respiration, pooling of airway secretions
- Mottling and cooling of the skin caused by vasomotor fluctuation with venous pooling, particularly tibial
- Mental status changes (delirium, restlessness, agitation, coma)

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have unrelieved physical suffering together with significant emotional, spiritual and social distress. Recognising a patient is dying before their final week can assist in getting patients into a setting where suffering can be managed sufficiently in the last hours of life. Box 3 highlights certain points that may help in identifying the actively dying patient. During this phase care is directed towards optimising physical comfort and minimising emotional, spiritual and social distress.^{2,19}

Breaking bad news

Gynaecological cancers are predominantly diagnosed by general gynaecologists and this life-altering news is usually conveyed before referral to gynaecological or other oncologists. Specialist gynaecologists need to be competent in conveying bad news. The SPIKES (Setting, Perception, Invitation, Knowledge, Emotion, Strategy and Summary) protocol may aid when communicating bad news.^{8,20} See Box 4. In step 1 of the protocol the healthcare provider focuses on setting up the conversation in a private area with everyone the patient would like to have present. The patient's current perception of the situation is then evaluated (step 2), followed by obtaining permission to discuss the situation (step 3). The bad news is communicated slowly and in simple language during step 4. Following delivery of the bad news, the patients emotional response is addressed empathically (step 5) and a plan is made (step 6) for the road ahead.^{8,20}

Box 4: SPIKES protocol for breaking bad news^{8,20}

- **Setting:** setting up the conversation in a private area
- **Perception:** evaluating current perception of the situation
- **Invitation:** obtaining permission to discuss the diagnosis
- **Knowledge:** communicated news slowly and in simple language
- **Emotion:** emotional response is addressed empathically
- **Strategy and summary:** summarizing the conversation and devise a plan

Conclusion

Dealing with death and terminally ill patients leaves us to confront our own fears. Doctors often have difficulty in shifting care from rescuing and healing to comforting and supporting.³ Specialist gynaecologists have a fundamental role in palliative care by diagnosing, discussing and treating the primary disease, navigating subsequent care and managing symptoms during different phases of the disease.⁸ Offering and assisting patients with palliative care allows them to live and die with minimal suffering and dignity and should be part of the holistic treatment of any patient diagnosed with cancer.

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