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Review Article

Empowering patients: integrating palliative care in gynecologic cancer treatment

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ABSTRACT

Cervical cancer severely impacts women's health, especially in low- and middle-income nations. Patients experience significant symptoms at every stage of this cancer course, from diagnosis to treatment and beyond. Palliative care (PC) integration becomes crucial, even if oncological therapies have historically focused on disease-centric methods. PC is a multifaceted field that addresses end-of-life care as well as psychological, social, and spiritual issues in addition to physical illnesses. To improve patient satisfaction, treatment adherence, and overall quality of life, early PC initiation within the context of multimodality care is essential. Advanced patients require heightened PC and a smooth transfer to hospice care as they approach terminal disease. This emphasises how crucial it is for oncology and PC teams to work together to provide comprehensive cervical cancer management. Healthcare practitioners can improve results and maintain the overall health of women affected by this condition through combined efforts. This review article emphasises the importance of early PC integration and collaboration in the cervical cancer management continuum to offer comprehensive care and enhance patient outcomes.

Keywords: Pain, Malignant bowel obstruction, Nausea and vomiting, Dyspnea, Bone

INTRODUCTION

Palliative care (PC) represents a compassionate approach aimed at enhancing the quality of life for those facing life-threatening illnesses. It focuses on providing appropriate pain and distressing symptom management in addition to addressing each individual's psychosocial and spiritual needs while honouring their individual beliefs and cultural background. A holistic approach to minimising suffering is ensured by including the principles of PC early on, regardless of the goal-cure, life-prolonging, or preparation for death. Recognising the significant influence of PC, the society of gynecologic oncology emphasises its significance in the treatment of patients with gynecologic cancers. Alongside the primary oncologist, this multidisciplinary team may consist of PC specialists, case managers, psychologists, spiritual counsellors, and primary care physicians. When combined, they assist at every stage of the illness, from diagnosis to handling problems associated with therapy to, if necessary, transferring to hospice care towards the end of life. PC has a critical role in improving the well-being and quality of life of patients with advanced gynecologic malignancies. This highlights the significance of good communication techniques and symptom management for these patients along with a collaborative team effort, involving a diverse array of professionals to effectively address patients' varied needs.[1]

BREAKING BAD NEWS

Whether it's about unexpected surgical results, cancer progression, or inherited genetic features, gynecologic oncologists frequently have to break unpleasant news to

patients. Bad news that isn't properly conveyed might make patients more stressed and anxious, which could have a detrimental effect on their health. Despite its significance, doctors and fellows rarely receive formal training on how patients interpret and are impacted by receiving such news. According to surveys, there is a training gap; many fellows have cared for patients who are dying without receiving specific training on how to break such news.[2]

Oncology curricula now contain communication skills training, incorporating techniques such as the "SPIKES method" created by Baile et al (Table 1).[3] These strategies are meant to provide oncologists with the tools they need to break bad news to patients and handle tough conversations.

Table 1: SPIKES-a six-step protocol for delivering bad news.

Steps	
Step 1-S-Setting up the interview	Arrange for privacy Involve significant others Sit down Make connection with the patient Manage time constrains and interruptions
Step 2-P-Assessing the patient's perception	"What is your understanding of your medical situation?"
Step 3-I-Obtaining the patient's invitation	"How would you like me to give information about your results?"
Step 4-K-Giving knowledge and information to the patient	Provide a warning shot. Appropriate level of comprehension and vocabulary for the patient. Avoid excessive bluntness Give information in small chunks and reassess understanding.
Step 5-E-Addressing the patient's emotions with empathic response	Observe for emotion on part of patient, identify emotion of patient and reason for emotion
Step 6-S-Strategy and summary	Determine patient's specific goals and fear, establish plans to address patient's goals/ fear

Caretakers must be able to accurately judge the reliability of the information they are providing in addition to knowing how to break bad news. Studies show that doctors frequently overestimate the chances of survival for cancer patients who are terminally ill, which affects the expectations of the patient and their families. To properly manage symptoms in advanced gynecologic malignancies, open discussions regarding prognosis and treatment objectives are essential. These conversations also provide a chance for discussion over expected symptoms and symptom-relieving measures.

COMMON SYMPTOMS IN GYNECOLOGY MALIGNANCY

Dyspnea

Dyspnea, or difficulty breathing, is a common, subjective symptom that can vary in severity and quality in patients with terminal cancer. It cannot be measured with lab testing or physical examinations, just like pain. Therefore, to address probable underlying causes, individual evaluation is essential. Dyspnea has an impact on psychological health as well; it is frequently associated with anxiety and depression, particularly in acute episodes.[4] Many terminal patients may not be able to receive treatment for their cause, but in certain circumstances, particular treatments are available that can relieve symptoms without compromising the goals of less intrusive therapy (Table 2).

Table 2: Dyspnea, etiology and intervention strategies.

Disease process	Possible intervention
Pneumonia	Antibiotics, pulmonary lavage
Pneumonitis, radiation or chemotherapy induced	Glucocorticoids
Venous thromboembolism	Anticoagulation, IVC filter
Pleural effusion	Indwelling catheter, thoracentesis, pleurodesis
Airway obstruction by tumor/ lymphadenopathy	Radiation therapy, glucocorticoids
Bronchoconstriction (COPD, asthma)	Bronchodilators, glucocorticoids
Retained or excess secretions	Anticholinergic agents
Massive ascites	Drainage, including indwelling catheter
Anxiety, including hyperventilation	Anxiolytic, cognitive behavioural therapy

Supportive interventions for dyspnea relief include music, cognitive behavioural therapy, and guided imagery as relaxing methods. Chest wall percussion therapy and facial cooling reduce the sense of dyspnea.

Walking assistance and breathing exercises like diaphragmatic and pursed lip breathing can help manage symptoms.[5] Although giving more oxygen is a typical treatment for hypoxemia, dyspnea may not always improve. Titrated for individual response, systemic opioids, especially morphine, are first-line pharmaceutical alternatives. Over placebo, nebulized opioids have not demonstrated any effect. A benzodiazepine such as lorazepam relieves anxiety associated with dyspnea.

Patients with COPD or a history of smoking may benefit from bronchodilators, while diuretics and glucocorticoids may be helpful in certain situations, such as heart failure or pneumonitis.[6]

Pleural effusion

Pleural effusions can cause dyspnea, coughing, and chest pain. They are common in terminal cancers such as ovarian cancer. Thoracentesis performed repeatedly carries dangers and inconveniences. Long-term options include chemical pleurodesis/indwelling tunnelled pleural catheters.[7] Pleurodesis has a 50-100% success rate and employs agents like talc to stop fluid accumulation. Although indwelling catheters give patients autonomy and enable outpatient drainage, they also come with hazards, such as infection and obstruction. Indwelling catheters and chest tubes with talc pleurodesis didn't significantly vary in their ability to relieve dyspnea, according to recent study.[8]

Haemorrhage

While uncommon, terminal haemorrhage poses serious problems for cancer patients since it frequently causes fast blood loss and depletion, which can occasionally be fatal. It may result from underlying pathologic disorders, tumour invasion of blood vessels, or both. The genitourinary, respiratory, and gastrointestinal systems are the most common bleeding locations. While certain bleedings are recognised, interior bleedings might require imaging for diagnosis.[9]

Volume resuscitation and treating any underlying coagulopathies or hematologic deficits are the first approaches. The source of the bleeding determines the different control techniques. External-beam radiation therapy or packing may be sufficient for mild vaginal haemorrhage.[10] Haematuria can result in bleeding due to tumour invasion or treatment-related problems such as haemorrhagic cystitis. The first steps are cystoscopic assessment and bladder irrigation. Interventions such as PGE2 injection or alum infusion may be tried if the patient is unresponsive, with formalin being the ultimate option.

A tailored strategy is needed to manage terminal haemorrhage, assessing the advantages and disadvantages of different therapies following the needs and circumstances of each patient.[11,12]

The following are some helpful strategies for handling terminal haemorrhage: Make sure nurse or other qualified staff is available to help. Provide psychological support to patient and their family during this time. Apply pressure to the bleeding site if at all possible. Use dark towels and suction to help contain and remove blood. Give oxygen to patient to ensure their comfort and well-being. Take into consideration use of sedatives/ narcotics to help with any pain or distress the patient may be going through.

One particular sedative that may be beneficial is midazolam, which is known for its rapid effects. Its administration usually involves injecting/subcutaneously administering dosages of 2.5 or 5 mg with the possibility to repeat doses as needed after 10 to 15 minutes, which should be explained to carers. These actions are intended to give the patient and their loved one's compassionate care and support during a difficult as well as the sensitive period.[13]

Nausea and vomiting

For many cancer patients who are nearing the end of their lives, nausea and vomiting can be extremely distressing symptoms. Numerous triggers in the gastrointestinal tract, vestibular apparatus, limbic system, cerebral cortex, and chemoreceptor trigger zone (CTZ) can cause nausea. A reflexive reaction that happens after this stimulation is vomiting. Appropriate treatment is guided by knowledge of these mechanisms.[14] Anaemia and vomiting are frequently caused by malignant intestinal obstruction in women with ovarian cancer. On the other hand, isolated vomiting or other symptoms of meningeal irritation should raise the possibility of brain metastases. Opioid usage, problems with gastrointestinal motility, and disorders related to metabolism, such as electrolyte imbalances or uremia, may also be contributing causes.

General guidelines for effective pharmaceutical therapy include consistent dosing, the best possible dosage and route of administration. It is important to use caution when using drugs that have similar side effects. For example, prochlorperazine and haloperidol, two dopamine antagonists, when combined, enhance the likelihood of dystonic responses (Table 3). A sophisticated strategy that prioritises each patient's demands while reducing side effects is necessary to manage nausea and vomiting in terminally ill patients and maintain their comfort and quality of life.

Table 3: Commonly used antiemetic drugs.

Class	Drug	Principal action	Major adverse events
Dopamine antagonist	Chlorpromazine, prochlorperazine, Metoclopramide, haloperidol	CTZ/ vomiting center	Dystonia, akathisia, sedation, postural hypotension
Anticholinergic	Scopolamine, hydroxyzine	Vestibular, vomiting centre, periphery, GI tract	Dry mouth, blurred vision, ileus, urinary retention, confusion

Continued.

Class	Drug	Principal action	Major adverse events
H1 antihistamine	Diphenhydramine, promethazine	Vomiting center, upper GI tract, vomiting center	Dystonia, akathisia, sedation
5-HT3 antagonist	Ondansetron, dolasetron, granisetron, palonosetron	Upper GI tract	Headache, fatigue, constipation
Steroids	Dexamethasone	Not known	Hyperglycemia, headache, oral candidiasis, peptic ulcer, insomnia, anxiety, psychosis
Cannabinoids	Dronadinol	Vomiting center	Sedation, anticholinergic, euphoria, dysphoria, tachycardia
Benzodiazepine	Lorazepam	Not known	Mild sedation, amnesia, confusion (avoid in elderly)

Anorexia

The second most prevalent symptom among patients with advanced cancer is anorexia, which can be quite upsetting for both the patient and the carer. Complex inflammatory pathways and metabolic alterations are its underlying causes, which frequently indicate a bad prognosis and affect how well treatment responds.[15] It is crucial to address reversible factors such as discomfort, constipation/adverse drug reactions. However, it might not be possible to reverse anorexia in cases with advanced gynecologic cancers with intestinal blockage.

Short-term appetite enhancement can be achieved with pharmacological therapies such as low-dose corticosteroids or gastrokinetic drugs.[16] The treatment of anorexia has also demonstrated promise with progesterone medications.[17]

Although the appetite-stimulating effects of cannabinoids, such as dronabinol, have been examined, their potential for toxicity, including euphoria and hallucinations, limits their use.

Enteral feeding or parenteral nutrition is not advised in the terminal phase of cancer cachexia or anorexia since it does not reverse the underlying metabolic abnormalities causing these conditions.[18] By teaching patients and carers to refocus on nutritional goals during end-of-life care, the needless suffering caused by forced feeding can be reduced. Comfort and quality of life throughout last stages of cancer depend substantially on supportive treatment that recognises the complex nature of anorexia while honouring patient's dignity and specific requirements.

Malignant ascites

Due to the increased risk of malignant ascites, which causes severe pain and suffering for patients, ovarian cancer offers unique challenges. The intricacy of this condition's pathophysiology is highlighted by the underlying mechanisms that contribute to it, such as tumour invasion into liver tissue and lymphatic blockage. The main goal of palliative treatment is to reduce ascites-related symptoms such as discomfort, breathing difficulties, early satiety, and swelling. While PleurX drains provide a safe and efficient option for refractory cases, offering comfort until the end of life, paracentesis remains the first choice for immediate relief.[19]

By targeting portal hypertension, diuretic therapy may provide some relief for ascites associated with hepatic metastases. Furthermore, by altering the tumour microenvironment, drugs that target the vascular endothelial growth factor (VEGF) have the potential to prevent the formation of ascites. Although novel approaches such as immunologic treatments and intraperitoneal hyperthermic chemotherapy are being studied, their possible side effects and related expenses might prevent them from being widely used in this context.[20,21] Prioritising patient comfort and quality of life in the management of malignant ascites is essential. Interventions should be customised to meet each patient's needs while taking the risks and limitations of different treatment approaches into account.

Malignant bowel obstruction

One of the most upsetting complications of gynecologic malignancies, especially for women with recurrent ovarian cancer, is malignant intestinal obstruction. This challenging condition affects about 35% of these people and frequently ends up being the main cause of death. A variety of symptoms, including as nausea, vomiting, stomach pain and distention, and changed bowel habits, are commonly seen in patients. Conservative medical management, such as intravenous fluids, fasting, and pain and nausea control, is the first course of treatment. Patients and their doctors must make a difficult choice between surgery, chemotherapy, or ongoing medical care if conservative approaches are unsuccessful. The extent of the disease, chance that patient will respond to treatment, the patient's preferences, and overall life expectancy all play a role in this highly personalised decision.[22]

The choice between surgical and medical management for malignant intestinal obstruction is still difficult because there is little data to support chemotherapy.[23-25] Surgery may be considered in certain circumstances, even though it is controversial due to the accompanying morbidity and

mortality. On other hand, informed consent is essential, outlining the possible risks and consequences of surgery. Chemo-resistant diseases, low-performance status, and other clinical signs are indicators of an unfavourable result. Although there isn't a perfect tool for making decisions, taking these things into account can help choose the best course of therapy and improve patient care. A patient's preferences and other unique circumstances must be carefully taken into account when managing malignant bowel obstruction, with an emphasis on enhancing quality of life and reducing needless suffering.[26] Patients may choose ongoing medical care over surgery/chemotherapy when conservative methods are ineffective in treating malignant intestinal blockage. A venting gastrotomy tube may be able to relieve discomfort in certain situations more permanently. Most patients report great relief from nausea and vomiting after placing these tubes.

Metallic stents that expand on their own, which are flexible, are a viable option in certain situations if blockage is limited to a manageable area. These stents, which can be placed radiographically or endoscopically, are safe and efficient at getting around the blockage.

Adjuvant medications such as octreotide and prednisone may also relieve symptoms in addition to TPN. By decreasing peri-tumoral oedema, steroids can help relieve obstructive symptoms; on the other hand, octreotide may lessen colic and intestinal distention. However, the costs and hazards associated with their use should be taken into account.[27]

Another prevalent anxiety among patients receiving PC is constipation, which is frequently made worse by opiate use. Opioid-induced constipation can be avoided and managed with a proactive strategy that includes a standing bowel regimen, ensuring frequent bowel movements and patient comfort. Overall, treating malignant bowel obstruction and related symptoms in women with gynecologic cancer requires individualised, compassionate care that is sensitive to each patient's needs and preferences.[28]

PAIN MANAGEMENT

The literature on pain management in gynecologic oncology patients is scarce, even though pain is still a major concern for these patients even after surgery. Nonetheless, these patients are covered by evidence-based recommendations for managing cancer pain.

It's critical to distinguish between nociceptive and neuropathic pain while evaluating pain. Neuropathic pain feels like burning, tingling, or shooting sensations; nociceptive pain is generally severe and localised. The traditional world health organisation pain ladder (Figure 1) suggests giving stronger drugs to individuals with more pain. However, the strategy has changed over time to incorporate adjuncts, education, psychosocial support, and non-opioids at every stage. Non-opioid analgesics such as acetaminophen or aspirin, should be used with caution due to side effects and can be used to treat mild pain.[29]

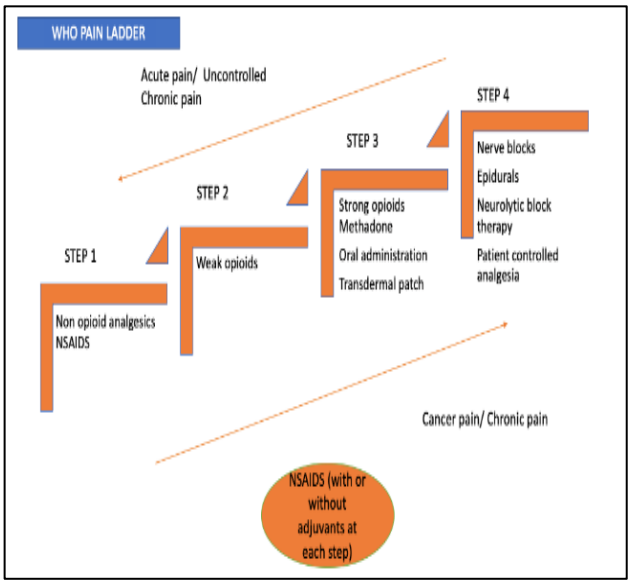

Figure 1: WHO pains ladder.

Acetaminophen and an opioid such as hydrocodone or oxycodone may work well together for moderate pain. A further non-opioid option is tramadol. Treatment for severe pain should use long-acting opioid agonists like oxycodone or morphine. Both nociceptive and neuropathic pain respond well to methadone. However given the possible adverse consequences, such as a longer QT interval, vigilance is required.[30] An effective combination of both long-acting and short-acting opioids can be used to treat most pain. The patient's 24-hour opioid demands should be the basis for dosage modifications, and breakthrough pain should be taken into account.[31,32] For neuropathic pain, adjunctive analgesics such as antidepressants or anticonvulsants may be administered.

ADJUVANT MEDICATIONS AND INVASIVE PROCEDURE FOR PAIN

Adjuvant drugs, sometimes referred to as co-analgesics, are vital for maximising pain relief even while analgesics are essential for treating cancer pain. Although their original intended usage was for different objectives, adjuvant medicines can effectively manage pain when administered in conjunction with analgesics at any level of WHO pain ladder. Increasing efficacy of opioids is main objective of co-analgesic use. Adjuvants must, however, be treated with the same caution as opioids. Adjuvants can be difficult to manage at times due to their inability to be easily monitored by blood tests, their limited dose and delivery route flexibility, possibility of an organ damage ceiling, and their propensity to cause irreversible harm.

Different co-analgesic classes have advantages of their own. These consist of NMDA receptor channel blockers, corticosteroids, antidepressants, anti-epileptic

medications, and bisphosphonates (Table 4). Every class has unique traits and factors to take into account, which adds to the all-encompassing strategy for managing cancer patients' pain.[33]

Table 4: Commonly used adjuvant drugs.

Class	Drug	Principal action	Major adverse events
Steroids	Dexamethasone, prednisone	Inhibit prostaglandin synthesis. Decrease inflammation	Hyperglycemia, headache, oral candidiasis, insomnia, anxiety, psychosis
Antidepressants	Tricyclic antidepressants, desipramine, nortriptyline, serotonin- norepinephrine reuptake inhibitor (SNRI), velnaflaxine, duloxetin	Inhibit norepinephrine uptake	Prolong QTc interval, sexual dysfunction anti-cholinergic effects, lower seizure threshold, nausea, sexual dysfunction, somnolence, hypertension
Anticonvulsants	Gabapentin, pregabalin	Inhibit depolarization of neurons	Dizziness, somnolence, mental cloudiness
Bisphosphonates	Pamidronate, zoledronic acid	Osteoclast	Renal impairment Flu-like syndrome with initiation of treatment

Corticosteroids

Steroids are prescribed to about 40% of patients receiving PC, while their usage is frequently not limited to pain relief. Although some reports indicate that steroids may reduce pain, there isn't sufficient evidence to back up this assertion. Steroids can aid with pain relief by lowering inflammation and calming nerve activity. Low dosages of dexamethasone, usually 1 or 2 mg taken twice daily, are advised for long-term care. Higher intravenous dosages, between 50 and 100 mg, may be required during pain crises in cases of extreme pain.[34,35]

Steroids have known and common negative effects, despite their possible benefits. Utilising the lowest effective dose for the shortest amount of time is therefore imperative. But in the case of end-stage disease, the short-term advantages of steroids in symptom management may outweigh any long-term risks.

Antidepressants

In addition to being widely used as effective analgesics in general, antidepressants are also prescribed for the treatment of neuropathic pain. Though their pain-relieving benefits are not exclusively reliant on elevating mood, they can be especially helpful for reducing pain connected to a low mood. Systematic evaluations have shown that tricyclic antidepressants are at least somewhat useful in relieving pain. Furthermore, more recent research emphasises the effectiveness of serotonin-norepinephrine reuptake inhibitors, such as duloxetine and venlafaxine, in the treatment of pain.[36,37]

Anticonvulsants

Pregabalin and gabapentin, both FDA-approved for specific types of neuropathic pain, have shown promise in easing neuropathic pain associated with cancer. However, data suggests that these medications may not be as helpful in treating neuropathic pain brought on by chemotherapy, which raises concerns about their broad applicability. Pregabalin outperformed gabapentin in a comparative trial, although this finding is controversial due to study design problems.[38]

NMDA receptor channel blockers

PC is investigating the use of NMDA-receptor channel blockers, such as ketamine, which are associated with hyperalgesia and neuropathic pain. Although ketamine, which is generally used as a general anaesthetic, can be utilised for neuropathic pain management at lower dosages, there is insufficient data to support its effectiveness in treating pain associated with cancer.[38,39]

INVASIVE PROCEDURE FOR PAIN CONTROL

Interventional therapies including nerve blocks, injections, and implantable devices may provide relief for patients who are unresponsive to traditional opioid and adjuvant-based pain management techniques. Although there has been some success with these operations, which are carried out by specialists, there is still a lack of robust evidence to support their efficacy.

BONE METASTASIS

Although they are uncommon in gynecologic tumours, bone metastases present serious difficulties for patients because they frequently result in pain, fractures, hypercalcemia, and spinal cord compression. Aiming to reduce symptoms while maintaining functional independence and quality of life, management is based on the clinical and illness state of the patient.[40]

The main method for treating excruciating bone metastases is external beam radiation therapy, which

efficiently reduces localised symptoms with one or more fractions as required.[41] According to the WHO pain ladder, treating pain frequently entails increasing dosage of opioids and adding adjuvant medications and nerve blocks.

Bisphosphonates, such as zoledronic acid and pamidronate, are essential for controlling bone resorption and pain, postponing the onset of metastases, and enhancing quality of life.[42] A monoclonal antibody called denosumab provides additional defence by preventing bone deterioration; it works especially well in cases of breast cancer.

In cases of spinal cord compression or instability, surgical intervention may be required to stabilise the bones.[43]

While surgical decompression followed by radiation therapy is essential for maintaining ambulation and quality of life in patients with progressive neurological deterioration, vertebral body kyphoplasty can relieve pain from lytic vertebral body metastases.[44]

HYPERCALCEMIA

About thirty per cent of patients with malignant illnesses have hypercalcemia, which is defined by high serum calcium levels. Some may not exhibit any symptoms at all, but others deal with consequences like constipation and polyuria in addition to gastrointestinal distress like nausea, vomiting, and appetite loss. Neurologic symptoms, which usually appear within six months and range from irritability to muscle weakness, psychosis, or even coma, indicate a critical stage that is frequently linked to advanced cancer and a dismal prognosis.

The patient's entire clinical status must be carefully considered while designing a hypercalcemia treatment plan. The first steps concentrate on increasing intravascular volume, which is usually accomplished by a continuous infusion after a saline bolus. The next line of treatment, especially in symptomatic instances, is bisphosphonates. For severe hypercalcemia, bisphosphonates and calcitonin together provide a more rapid and long-lasting decrease in serum calcium levels than either medication alone. The goal of this integrated strategy is to help people struggling with this difficult illness as quickly as possible.[45]

BRAIN METASTASIS

Brain metastases are rather rare in gynecologic cancers, usually manifesting only when patients have symptoms that require medical intervention. Headaches, convulsions, nausea that doesn't go away, neurological deficiencies including weakness or trouble walking, and vision abnormalities are some of these symptoms.[46] Steroid injections are frequently the initial line of treatment after a diagnosis. In a comparatively short amount of time, these drugs relieve the cerebral oedema surrounding the metastases and relieve symptoms. For patients with moderate to severe symptoms, the recommended starting dosage of oral dexamethasone is 4-8 mg/day, with dosage changes dependent on the severity of symptoms.[47] To reduce the chance of exacerbating cerebral oedema in patients who will be receiving radiation therapy, steroids should be started 48 hours before the start of treatment.[48] Steroid treatment is often continued for the duration of the radiation therapy, then gradually tapered off at least two weeks after treatment. Specifically, patients who exhibit seizures as a symptom of brain metastases are prescribed anti-epileptic medicines (AEDs).[49]

Radiation oncologists and neurosurgeons must work together to manage brain metastases to decide on the best course of action. Several criteria, including the number of metastatic lesions, influence treatment decisions. Depending on their overall prognosis and systemic disease management, patients with fewer lesions may get stereotactic radiosurgery or whole-brain radiation therapy (WBRT).[50]

Particularly in patients with a shortened life expectancy, it is crucial to take into account the possible dangers connected to WBRT, such as radiation-induced leukoencephalopathy and neurocognitive impairment. There may be more effective approaches in certain situations, such as the WBRT with the hippocampus sparing.[50]

DELIRIUM

Delirium affects up to 85% of patients who are approaching the end of their lives and is a common occurrence in patients with advanced medical conditions. It appears as an abrupt beginning of cognitive, attentional, and alertness problems that can change in intensity over time. This disorder frequently results from underlying medical conditions and can cause several negative effects, such as extended hospital admissions, needless medical treatments, higher death rates, more financial burden, and significant grief for patients and their families.

Based on variations in consciousness levels and the existence or absence of psychomotor agitation, delirium can be divided into several categories.

Hypoactive delirium is the most common category in PC settings. It is typified by drowsiness, psychomotor impairment, and lethargy. It is more likely to be fatal than other types of delirium and is frequently associated with conditions like hypoxia, metabolic imbalances, or hepatic encephalopathy. Remarkably, hypoactive delirium and depression are similar enough to frequently result in a misdiagnosis.[51,52]

Conversely, agitation, restlessness, hyperactivity, hallucinations, and delusions are characteristics of hyperactive delirium. This subtype is often linked to disorders such as withdrawal from drugs or alcohol or negative drug reactions.[53]

Medications (benzodiazepines, opioids, steroids, and anticholinergics), infections, electrolyte imbalances, hypoxia, renal or liver failure, constipation, and urine retention are major causes of delirium in patients with terminal gynecologic malignancies. Both nonpharmacologic therapies and, where required, pharmaceutical methods should be included in delirium treatment plans. Nonpharmacologic strategies include avoiding constraints, reducing excessive stimuli, using family members or volunteers as constant companions for reassurance, keeping things familiar to preserve orientation, and promoting communication with the use of glasses or hearing aids.[52]

First-line pharmacologic therapies for hyperactive delirium with the possibility for recovery may include antipsychotics such as haloperidol or chlorpromazine to lessen agitation. Patients who are intolerant to haloperidol may benefit from considering atypical antipsychotics like olanzapine and risperidone. It's crucial to be aware of their drawbacks, though, such as expenses and administrative procedures.

Benzodiazepines such as lorazepam may be more appropriate in situations of irreversible hyperactive delirium, either by themselves or in conjunction with antipsychotics.[53] The management of delirium should ultimately be based on the patient's goals of care, with an emphasis on comfort and relief-even at the expense of awareness. Patients will receive support and care that is customised to meet their unique requirements and preferences owing to this comprehensive approach.

THE LAST 48 HOURS OF LIFE

The majority of people prefer to die in the comfort of their own homes, yet about one-third of cancer patients will spend their last hours in a hospital or intensive care unit. This disparity highlights the difficulty in making decisions about end-of-life care and the critical function hospice care plays in respecting patients' desires.[54] When a patient is near death and in a hospital bed, comfort care becomes the primary focus of medical interventions. All non-supportive medications, unnecessary imaging or laboratory tests, and supportive medications should be stopped during the final 48 hours of life. Comfort-related medications such as opioids, anxiolytics, and antiemetics should be given subcutaneously or intravenously, taking into account the weakened status of patients who may have difficulty with oral intake.

To avoid unnecessary suffering, medical devices such as implanted cardioverter defibrillators and telemetry that are not useful in PC should be switched off or stopped. During this phase, it is critical to control symptoms, including pain, respiratory tract secretions, delirium-associated agitation, and dyspnea.[55]

When a patient is dying, they frequently experience a "death rattle," a condition where secretions build up in the airways. Although it is usually not painful for the patient, family members at the bedside may experience distress. There are times when straightforward interventions like moving the patient's head can reduce the noise produced by an obstruction in the airway.

To control excessive secretions, pharmacologic alternatives such as glycopyrrolate, atropine, or scopolamine may also be used. Reducing feedings and fluid consumption might also assist in minimising fluid accumulation in the body, which helps ease some of the last moments of life.[56]

The aim is to provide patients with the utmost peace and comfort during these critical moments, while they are surrounded by the love and support of their family and carers. It's a moment to show empathy, compassion, and respect for each person's dignity as they pass from this life to the next.

CONCLUSION

The care for patients with advanced gynecologic malignancies requires a multifaceted approach that prioritizes comfort and dignity. From managing pain and symptoms to addressing psychosocial needs and honouring patients' preferences, a holistic approach is essential. Hospice care plays a vital role in facilitating peaceful transitions, allowing patients to spend their final days in familiar surroundings with their loved ones. Ultimately, the goal is to provide compassionate and personalized care that respects the individuality and dignity of each patient until the very end.

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