

MALIGNANT WOUNDS:
**MANAGEMENT IN
PRACTICE**

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Foreword

A malignant wound is a devastating complication associated with cancer. Malignant wounds can be extremely challenging – and distressing – for patients, family members and clinicians. They are unique wounds to manage, which can be very different from any other wound type.

We identified a need for increased awareness and education surrounding this wound type, with the aim of increasing clinician confidence and ultimately improving patient wellbeing and outcomes.

A group of experts met in March 2024, to discuss what information was needed to aid practice and potentially improve patient quality of life. This document represents the guidance and information discussed during the meeting.

The aims and objectives of this document are:

- To provide a clear definition of malignant wounds and their physiology
- To address the impact of these wounds on practice, plus the challenges this entails
- To provide guidance on assessing these wounds and their unique symptoms
- To advise on setting objectives for care, communicating with patients and carers, and managing expectations
- To provide management guidance for malignant wounds in practice
- To identify gaps and potential needs for the future.

Increased awareness and communication around this difficult wound type is needed, and we hope this document assists clinicians to help patients, families and carers, and increases confidence and skills for healthcare practitioners.

With cancer diagnoses increasing and so many people being affected, this is a crucial issue.

Karen Ousey, Chair

Overview of malignant wounds in practice

It is estimated that there are currently more than 3 million people living with cancer in the UK, a figure that is predicted to rise to 3.5 million by 2025, 4 million by 2030 and 5.3 million by 2040 (Macmillan Cancer Support, 2024). Diagnosis rates are thought to have risen by 12% since the early 1990s (Cancer Research UK, 2024). Patients with cancer often suffer from lesions or wounds, which may be chronic, and may be caused by either the disease itself or because of cancer treatment. These wounds present unique challenges for the patient, their family and the multidisciplinary team treating them (Pramod and Rice, 2023).

There was a significant increase in referrals for management of malignant wounds in the year following the COVID-19 pandemic, which may be due to late cancer diagnoses or delayed referral during the COVID-19 pandemic. A potential gap in education around the management of oncology wounds may also be a potential causative factor (Pramod and Rice, 2023). The prevalence of malignant wounds is thought to be underreported in general due to feelings of shame, fear, and embarrassment among patients (Alexander, 2009).

What is a malignant wound?

Wounds that occur as a result of cancer may be referred to as: cancer wounds, oncology wounds, ulcerative cancers, fungating cancers, or malignant wounds (Cancer Research UK, 2024).

The expert group agreed that clarity around definitions is important. With this in mind:

- Malignant refers to the cause of the wound (i.e. malignant means cancer is present)
- Fungating refers to the fact that the tumour has broken the surface of the skin and become a 'wound'. The word 'malignant' may be particularly important to consider, as this emphasises the cause and magnitude of the impact of these wounds and the fact that they are unlike any other wound in practice.

Therefore, all wounds where cancer is present are 'malignant' wounds and some may be 'fungating'; the two definitions are not interchangeable.

Fungating wounds

'Fungating' malignant wounds occur when cancers grow and break through the skin surface, creating a wound; wounds can also develop directly from primary skin cancers such as squamous cell carcinomas and malignant melanomas, or as a result of treatments such as radiotherapy, which can have an adverse effect on the skin and increase the risk of skin damage. A malignant cutaneous wound may be one that grows either outwards (presenting as raised nodules) or inwards from the skin (presenting as crater-like ulcers), or both (Starace et al, 2022). The growth of cancer can also reduce the supply of oxygen to the area, causing the skin and the tissue underneath to become necrotic, so the wound may become infected and ulcerated (Macmillan Cancer Support, 2020). Conversely, increase in vascularity may increase the risk of bleeding.

Fungating malignant wounds are relatively rare, but are most common in breast cancer, head and neck cancers, and skin cancers such as melanoma, as these develop close to, or on, the surface of the skin (Macmillan Cancer Support, 2020). One study reported the prevalence rate of fungating wounds at 3.6% (Firmino et al, 2020).

It has been reported that cancer-related wounds often become infected, although data on this is limited in the literature (Vardhan et al, 2019). Many malignant wounds provide ideal conditions for secondary infection to develop, due to high exudate levels, the presence of necrotic tissue and some difficult-to-treat anatomical locations (Starace et al, 2022).

Symptoms of malignant wounds

Malignant wounds are often associated with (Starace et al, 2022):

- Malodour
- Pain
- Bleeding
- High exudate levels
- Oedema
- Necrosis
- Pruritus
- Infection.

It is important to note the psychosocial distress that may be caused by these wounds, and that they are a constant reminder to the individual and family of progressive cancer (Schultz et al, 2002). The rapid growth of a tumour can lead to the compression of contiguous structures, such as soft tissues, nerves and blood vessels, leading to necrosis or spontaneous bleeding and causing pain and mobility reduction (Starace et al, 2022). The symptoms attributed explicitly to malignant wounds are unique to this population (Tilley et al, 2016).

Physiology of malignant wounds

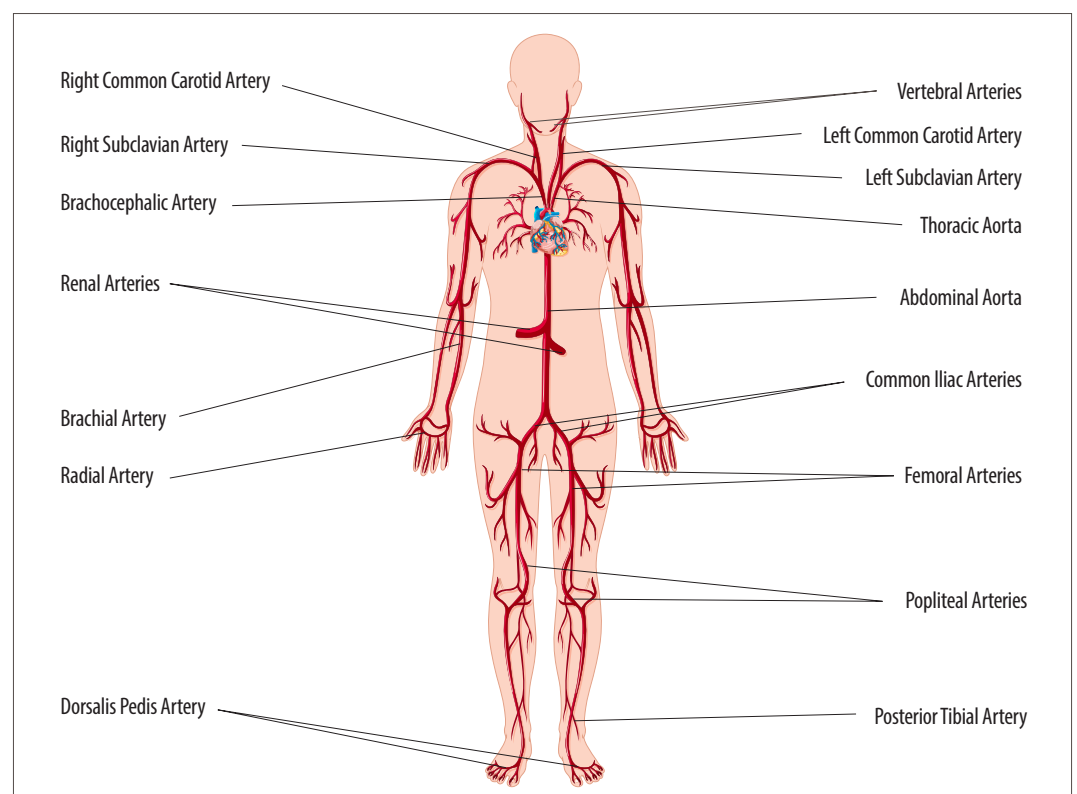
While malignant wounds are common in cancers that are associated with growth on, or near to, the surface of the skin, they can occur anywhere in the body. A systematic review of literature (Tilley et al, 2021) found that wounds can develop from any type of malignancy: the most prevalent are associated with breast cancer (66%), followed by head and neck tumours (24%); the groin, genitals, and back combined account for 3%, and all other sites account for 7% (Tilley et al, 2021).

Different anatomical locations may present different challenges in practice – for example, wounds on the head or face, genitals or in difficult-to-dress areas or those particularly prone to infection or other complications such as moisture-associated skin damage such as periwound maceration and intertrigo.

Damage to surrounding tissue and structures may occur in malignant wounds, and these wounds may be prone to bleeding due to imbalance in the haemostatic process. In some cases, tissue damage may include blood vessel erosion; where a malignant wound is close to a major artery, there is potential for this to lead to a major haemorrhage, which would be a catastrophic event (Marie Curie, 2021). See page 16 for more information on managing potential catastrophic bleeding.

See [Figure 1](#) for illustrated information on anatomy, where malignant wounds may commonly occur and where the risk of catastrophic bleeding (while rare) may be elevated.

Figure 1: Body map showing the body's main arteries



Courageous communication around malignant wounds

These wounds can be devastating for individuals and can occur at an already difficult time in their life. For clinicians, these wounds can be difficult to treat and are often distressing; with this in mind, clear and empathetic communication is vital.

Language

Using sensitive language around malignant wounds is important. The words used to describe the wound should be chosen carefully, remaining factual and avoiding words that might be upsetting for the patient. A raised nodule growing outwards from the skin is often described as 'cauliflower-like', and it is important to remember that comparisons to the individual's skin should never be made to food or other inappropriate terms (Dhoonmoon et al, 2021). The word 'fungating' may be upsetting to some individuals, with connotations of 'fungus'.

As malodour can be a particular problem in malignant wounds, it is vital to be sensitive about this issue. This may include being conscious of your body language and facial expressions as well as use of language.

Setting expectations

Malignant wounds will only have a chance to heal if the tumour causing them responds to the cancer treatment protocol. This means that many malignant wounds will not heal, due to the individual's overall health and circumstances, the physiological effects of cancer and the nature of the wounds themselves

(Deyell et al, 2021). This can be psychologically difficult for individuals; also, for clinicians, as this represents a different aim and expectation to managing most wounds, where the focus would ideally be on healing.

It is still important to set treatment goals where possible – in some cases this may still be healing, or reduction in wound size to reduce impact ('debulking' via systemic treatment); in others it may be symptom management (e.g. pain, malodour or exudate management). More information is available on managing these symptoms on page 13.

When the goal of cancer treatment is palliative care, treatment is centred around symptom control and improving quality of life (Cornish, 2019). Having difficult conversations about this may be upsetting for the clinician as well as the individual affected. Where healing is not possible, being honest about this may feel like 'taking someone's hope away'; however, if done sensitively, it may also be empowering for the individual to know what to expect and to be as prepared as they can be, giving them more information and more informed choice. Honesty, transparency and empathy are key (WUWHs, 2020).

Communicating with the individual and listening to them about their own concerns and preferences is key to any treatment. This is particularly relevant in malignant wounds, and working through this process with the individual should involve being realistic with them (and their family, friends and informal carers) about what is – and is not – possible.

There is often scope to be both honest and positive, focusing on what can be achieved and what the individual and clinician are able to achieve working together. For example, focusing on reduction of odour can often make a huge difference to the individual and their quality of life. See [Box 1](#) for tips on communication and listening.

Psychosocial impact

The psychosocial impact of malignant wounds can be devastating. Individuals with a cancer diagnosis who also have a wound may experience difficulties

Figure 2: Malignant breast wound (photograph courtesy of Susy Pramod)



with symptom management, disturbances of body image, decreased feelings of self-worth and alterations in their quality of life (Pramod and Rice, 2023). These wounds can often affect every aspect of an individual's life, including work, socialisation, and relationships. This may be due to many factors, including prolonged healing times (or the wound never healing), the repeated need for medical attention in the form of dressing changes, pain, infection and odour (Olsson et al, 2019).

One patient study demonstrated that presence of malignant wounds was found to correlate with the need for antidepressants (Firmino et al, 2020), emphasising both the potential impact of wounds on the individual and that they are likely to occur when the individual is already experiencing a difficult time in their life.

Additionally, these wounds may alter an individual's appearance, or be associated with symptoms that affect their daily lives and self-image, such as malodour or high exudate levels. It may be helpful to use a wellbeing diary for the individual to track their symptoms and identify key areas that may influence treatment aims.

Non-healing malignant wounds without effective therapy are a severe socio-economic burden for all involved, including patients, caregivers, and health services (Furka et al, 2022). It has been observed in practice that – as cancer prevalence has increased over recent years – more patients are being seen in practice, including a younger demographic. This trend is likely to continue, so it is important to bear in mind the differing needs of individuals that may be affected. For example, younger people may have concerns about work, particularly if they are self-employed; they may also have young children/dependents, so may benefit from using a family room for hospital visits, as well as being signposted to practical and emotional support.

See [Box 2](#) for tips on speaking to individuals about their quality of life, needs, preferences, concerns and fears. It is particularly important with these wounds that a person-centred approach is taken, involving the individual in decision-making, listening to them and

Box 1. Active listening and communicating empathy (WUWHS, 2020)

Active listening means that you are paying full attention to what the other person is saying. While this may seem simple, in a busy setting or as part of a hectic schedule, it can be difficult to achieve; however, it is vital to use your time with the individual to focus entirely on them. The purpose is to make the individual feel really listened to, which may also mean that clinical clues are picked up that may otherwise be missed. Attention should be paid to all the signals given by the individual, which may be verbal or non-verbal. There are three stages to the skill of active listening:

- Observation
- Understanding
- Reflection.

Box 2. Patient communication (adapted from Dhoonmoon et al, 2023)

- Be transparent and use simple language
- Ask the individual or caregiver direct questions to obtain information about their skin and wound
- Make sure the individual and their family/ carers understand their prognosis and treatment
- Be respectful and professional
- Check in with an individual's perceptions and understanding of their condition and wound status, including goals for care; avoid labels and seek clarity
- Include written information if necessary and appropriate – do not bombard the individual and make sure that information is revisited whenever necessary.

ensuring their unique needs and preferences are at the centre of all care. As such, care needs to be tailored to the individual with no 'one size fits all' solution.

Cultural issues

There may be cultural barriers, particularly in some geographical areas and demographic groups, that mean some individuals are less likely to receive timely treatment, which can adversely affect outcomes. There may be some embarrassment

or stigma around malignant wounds, particularly in areas such as the breast or genitals/groin, and individuals may prefer to hide these wounds rather than seek support.

A patient-centred study around living with cancer-related wounds found that the statement 'having this problem is very embarrassing' was a strong theme from respondents, due to symptoms such as odour and excessive leakage from the wound, with individuals describing the consequences of this on their social life and identity (Probst et al, 2013).

Beliefs about self-management and accessing professional care may also vary between individuals and demographic groups. There may be some individuals and ethnic demographics that have self-treated or sought assistance from alternative therapy clinicians. In some cases, this may mean that they are accessing wound care services at a later stage.

Geographical location may also have an effect, particularly for individuals living in rural areas. Reduced services may mean it is difficult to access care. If an individual has multiple issues and appointments to deal with (for example, if they are also having radiotherapy or having appointments with multiple services or clinicians), it may be too difficult to keep travelling to appointments they may need assistance with practical elements (e.g. seeking access to overnight stays).

End of life

While malignant wounds may be present for long periods of time, they are predominantly developed during the last months of life and are an indicator of the impending end of life (Alexander, 2010). One study found that the life expectancy for a person living with such a wound is very short, with an average of six to twelve months' survival (Lo et al, 2008).

Palliative care, with a focus on the individual's comfort and quality of life, is generally an appropriate course of action with these wounds (Starace et al, 2022).

Palliative and supportive care teams are often excellent examples of good communicators, as they

regularly have to have difficult conversations with individuals and their carers; they are also experts in pain management and can help if wound pain is a problem, or advising if pressure ulcer prevention is not possible if the individual cannot reposition due to pain.

Clinician mindset

It can be psychologically difficult to adjust to the concept of healing not being the aim, or not being possible. Additionally, the distress that individuals and their families, friends and informal carers may be experiencing may also be distressing or upsetting for the clinician.

It is important to remember that you are not letting anyone down or doing anything 'wrong' if healing is not possible. To help someone's quality of life – particularly at end of life – and to reduce the impact of the malignant wound on the individual and their carers can make a huge difference and give a profound feeling of satisfaction.

It is essential to look after your own mental health: it may be a good idea to speak to colleagues about difficult issues, or access staff psychological services if possible.

Self-care and cultivating resilience are vital for clinicians. Working in a role that involves caring for others can result in 'burnout' or 'compassion fatigue' (WUWHS, 2020).

Burnout results from the stresses of the clinician's interactions with his or her environment (i.e. being worn out by work, which can affect any profession); compassion fatigue results more from the relationship between clinician and patient (i.e. a preoccupation with absorbing trauma and emotional stresses of others, which may be likely to affect HCPs).

The main symptoms and signs of burnout are emotional exhaustion, a sense of ineffectiveness, or dissatisfaction with work, all of which can result in cynicism and detachment from work. Clinicians with burnout are more likely to make errors, and their patients are less satisfied with the quality of their care.

Compassion fatigue (also called secondary or vicarious trauma) is thought to compromise clinicians in their ability to care for others because of symptoms that parallel post-traumatic stress disorder, which might result in avoidance of situations in which patient suffering is involved.

It has been found that reflecting on experiences of dealing with emotionally draining circumstances, learning new skills, and finding meaning in working with individuals results in compassion satisfaction, allowing clinicians to be highly present and empathetic to the experience of suffering, as well as to feel energised rather than drained by it.

Assessment

In general, accurate and thorough assessment is the cornerstone of all wound care. In malignant wounds, this process may be slightly different than in any other wound types. This is because the symptoms of these wounds are often unique, and may not follow the same path as other wounds. Additionally, malignant wounds tend to be dynamic in nature: assessments can significantly change from day-to-day due to disease progression.

Using a structured wound assessment framework is still necessary. The TIMES OP system is often used in malignant wounds, which incorporates the additions of odour and pain into the standard TIMES framework (Schultz et al, 2003).

Measurement

While measuring the size of a wound is needed in malignant wounds (for example, to help choose the correct dressing size), this may not serve the 'usual' purpose of monitoring progress in terms of the wound size reducing and progressing to complete healing.

It may not be possible to make accurate measurements of the wound due to the wound's characteristics (for example, proliferative wounds tend to have irregular shapes and protrude, making them impossible to measure accurately). Medical photography is more appropriate for these types of wounds.

Holistic assessment

Malignant wounds are closely linked to the individual's overall health and wellbeing, making holistic assessment even more important than usual. For example, nutritional assessment is vital to the individual's overall health, and it is important to ensure the individual is adequately nourished and hydrated at this time. In head and neck cancers, many individuals will have a percutaneous endoscopic gastrostomy (PEG) feed, which will require consideration (e.g. managing the PEG, measures to help with dry mouth) and dietician input.

Asking the individual about their overall health and wellbeing, and assessing their physical appearance and mood, may be as important as assessing their

wound. Asking the individual about any issues that are concerning them, and what their priorities realistically are, may inform treatment and symptom management.

Pain

A validated pain assessment tool should be used to evaluate the intensity, location, and characteristics of pain associated with malignant wounds, which needs to consider both nociceptive pain (related to tissue damage) and neuropathic pain (related to nerve involvement). Listening to the individual's feelings about their pain is crucial, and pain management may be a key priority in many patients.

Evidence indicates that pain constitutes a major source of stress in individuals with wounds (Woo, 2010). Increased levels of stress and heightened anxiety have been demonstrated to lower pain threshold and tolerance, as the person may become more vigilant of somatic signals, resulting in a vicious cycle of pain, stress/anxiety, and worsening of pain.

Exudate and odour

These are both common symptoms of malignant wounds. Most wound odours are thought to arise from the metabolic processes of anaerobic bacteria and/or tissue degradation and/or poor tissue perfusion. In malignant wounds, foul-smelling compounds such as cadaverine and putrescine are released by anaerobic bacteria as part of the putrefaction of tissue (Black and Berke, 2020).

More information on symptom management around exudate and odour can be found on page 13. Both exudate and odour are issues that may be particularly distressing or embarrassing for individuals, which may limit their daily activities and cause psychological and social problems.

For exudate, it is necessary to establish the type as well as amount of exudate (see page 13); the amount of exudate can generally be determined by how frequently the dressing needs changing or leaks. It may also be helpful to determine the frequency and intensity of odour episodes, and to inquire about any factors that either exacerbate or alleviate the odour. Again, communicating and listening to the individual

Figure 3: Malignant wound on the groin extending to pubic area (photograph courtesy of Susy Pramod)

Figure 4: Ulcerative malignant wound on the thigh (photograph courtesy of Susy Pramod)



about their key needs, preferences and priorities will be an important aspect of decision-making and treatment.

Other wound-related issues

In individuals with a cancer diagnosis and related wounds, assessment will need to include other potential issues relating to the skin. For example, this may include the presence of satellite lesions or lymphoedema. Conducting a thorough assessment of the skin – focusing on the whole body rather than only the wound – should include asking the individual about their skin, how it feels and whether they have noticed any changes.

Prior to radiotherapy treatment, it is important to optimise the individual's skin condition; during treatment, weekly reviews should be made to assess the individual's skin on an ongoing basis (Society and College of Radiographers, 2020).

The periwound skin and protection strategies to avoid further damage to the surrounding skin should not be neglected as part of wound assessment; care of the periwound skin may form a key part of treatment.

Early detection and identification of any changes to the skin may improve outcomes and help to preserve the individual's quality of life, potentially avoiding or delaying further skin breakdown or deterioration of their condition.

Psychosocial assessment

It is important to enquire about the individual's emotional well-being, coping strategies, and their

social support network. This may be a difficult time for the individual, and they should be assessed for symptoms of anxiety, depression, distress, and social isolation related to their wound and overall health. Living with a wound can be a particularly distressing issue when already dealing with challenging circumstances (WUWHS, 2020). Where appropriate, if clinicians have concerns, the option of referral to psychosocial support services or counselling should be discussed with the individual. Occupational therapists and physiotherapists may be able to assist with practical issues as part of a multidisciplinary approach to the individual's care.

Assessing the patient's home environment and living circumstances, and any related psychosocial challenges, is an important safety consideration. Clinicians have a duty of care to consider safeguarding and duty of candour, particularly when working with individuals who may be vulnerable.

Patient capacity and support

Assessing an individual's capacity for understanding and being involved in their treatment will inform their care plan, as will assessing what wider support is available to them.

In recent years, particularly since the COVID-19 pandemic, there has been a move towards self-care, with this being encouraged for many individuals wherever possible. Malignant wounds often present unique situations; with these individuals it is often worthwhile to 'stop and think'. However, for some individuals, self-care where possible may help them to feel empowered and to have more independence and agency. Communicating with the individual

about their needs and not making assumptions will inform this process.

Clinicians may consider asking direct questions about the individual's lifestyle and how this is affected by their wound, such as:

- Is your wound affecting your work/socialising/relationships/daily activities?
- What is the biggest issue/problem with your wound?
- What would you most like to improve about your wound symptoms if you could?

It is also important to consider how the individual's feeling towards their wound may affect the support that is available to them. For example, if an individual is embarrassed about their wound, they may not share related issues with family members or carers, and may be likely to 'suffer in silence', affecting their quality of life and potentially affecting their health if this means treatment cannot be provided in a timely way.

When managing malignant wounds, it is particularly important to respect the individual's wishes for their treatment – as clinicians, we can advise, but the decision-making is up to the individual.

Anatomical location

The location of the wound is an important factor, particularly as malignant wounds may likely be in difficult-to-dress areas, or in areas that may cause additional issues – such as the face/head/neck, the breast area, or groin/genitals. Additionally, if a wound

is located close to a major artery, this may increase the risk of catastrophic bleeding (see page 16).

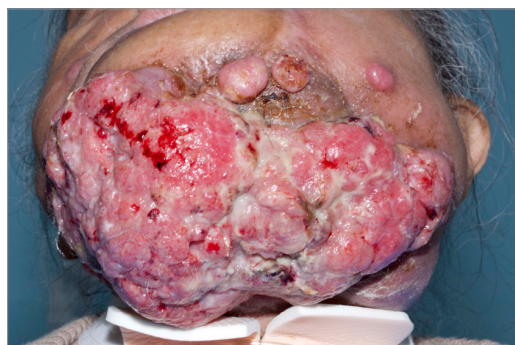
Wounds located on the head and face may be particularly challenging in practice. Depending on the wound's precise location, this may interfere with the individual's daily activities: wounds in or near the mouth may affect eating and drinking, swallowing or communication; wounds affecting the eye may limit the individual's sight.

Additionally, cosmesis and the individual's self-image may be affected as these wounds may be visible and difficult to conceal. This may cause some individuals depression, anxiety, feelings of shame and embarrassment, and social isolation (WUWHS, 2020).

Genital wounds may also be distressing for the individual and may cause complicated wound care challenges. These wounds may result in moisture-associated skin damage or continence issues that require barrier products to protect the skin from further damage. The individual may need to be referred for a separate continence assessment if further support is needed.

Along with the physiological and psychosocial issues associated with genital wounds, these wounds may be extremely painful, so pain relief for the individual may be a priority in their ongoing care plan. Additionally, these wounds may be embarrassing for the individual if situated in a personal or private area.

Figure 5: Proliferating malignant wound on the chin (photograph courtesy of Susy Pramod)



Symptom management

The treatment aim when managing malignant wounds is mainly focused on improving the individual's quality of life as much as possible. While symptoms vary according to the individual and their wound, there are some common issues that are likely to be present in these wounds, so managing these may be the focus of treatment.

Exudate management

Malignant wounds are often associated with high levels of exudate, which can be challenging in practice and unpleasant for individuals (e.g. potential leakage, soiling of clothing or bedding).

Dressing selection is a key component in exudate management. Depending on the exudate level, foam dressings or superabsorbent dressings should be utilised to manage the exudate. It is important to protect the surrounding skin; therefore, dressings with fluid-locking capabilities—preventing skin saturation and maceration—may also be beneficial.

Dressing conformability may be an issue in more pronounced and nodular wounds, which can impact on fluid absorption: if there is not good contact

between the dressing and the wound, exudate pooling and/or leakage may occur.

In cases when dressings cannot contain the exudate, it may be necessary to use a stoma bag with drainage port. Palliative radiotherapy may also be utilised to help to dry wounds.

It is also vital to use dressings that do not cause damage to fragile periwound skin, or cause any discomfort to the patient.

Barrier products may also be used to protect the surrounding skin. The appropriate type of barrier product can be chosen according to the patient's needs as preferences, as these are available in different formats (e.g. cream, film applicator, barrier wipes).

As well as exudate volume, exudate type should be considered. See [Table 1](#) for a list of exudate types and what this may mean for management.

Malodour

Odour is an issue that is often associated with malignant wounds, and is often cited as one of the

Table 1. Identifying different types of exudate (adapted from WUWHS, 2019)

Type	Colour/opacity	Consistency	Cause
Serous	Clear/amber/straw-coloured	Thin, watery	Often a normal part of healing, but an increase or excessive amounts may indicate an underlying issue requiring reassessment
Fibrinous	Cloudy	Thin, watery	Containing fibrin strands, may indicate inflammation (with or without infection)
Serosanguinous	Clear/pink to light red	Thin, slightly thicker than water	Presence of red blood cells indicates capillary damage, may occur post-operatively or due to traumatic dressing removal
Sanguinous	Red	Thin, watery	Low protein content or presence of red blood cells indicating capillary damage; may be associated with hypergranulation
Seropurulent	Cloudy, creamy, yellow or tan	Thin	Serous exudate containing pus, may indicate impending infection
Purulent	Opaque, milky, yellow, tan or brown; sometimes green	Often thick/sticky	Indicates infection, may be associated with malodour
Haemopurulent	Reddish, milky, opaque	Thick	Mixture of blood and pus, often due to established infection
Haemorrhagic	Red, opaque	Thick	May indicate trauma to the wound or bacterial infection

factors that can cause individuals the most distress and affect their quality of life the most (Probst et al, 2013). For individuals, odorous wounds can trigger feelings of shame, embarrassment and depression, and may contribute to malaise, nausea and loss of appetite, often leading to social isolation for individuals affected and feelings of guilt for caregivers during a critical time when both physical and emotional support are essential. Odours may also spread to clothing, bedding, furniture and living areas, further affecting quality of life (Black and Berke, 2020).

Debridement may help to reduce malodour; however, sharp debridement is not advised on any malignant wound. Malodour may also be due to bacterial burden, and use of antimicrobial dressings has been shown in some cases to reduce wound odour (Starace et al, 2022).

Guidelines advocate treatment with topical or systemic metronidazole in malodorous (or infected) fungating tumours. Systemic treatment is often required to reduce malodour, but topical metronidazole can be considered when systemic treatment is impractical or causes unacceptable side-effects, the cancer is relatively small and easily accessible for topical application, and/or the cancer is poorly vascularised and very sloughy (Palliative Care Formulary, 2022; NICE, 2024).

When odour cannot be well controlled, as is often the case with malignant wounds, concealing the odour may be the best option. This may be through dressings that help to absorb the odour: this is most likely to be a charcoal dressing, with some new options such as cinnamon dressings becoming more recently available. Other odour-masking items may be used including scent burners, incense, flowers, odour-neutralising sprays and air-fresheners in the room; aromatics or odour-absorbers can be placed in a container under or near the bed (or the individual's primary preferred location), such as vanilla beans, cider vinegar, charcoal, or baking soda. Drops of peppermint or tea tree oil can be placed on the outer dressings (Black and Berke, 2020). If tolerated, it is also advised to allow adequate air exchange and ventilation (e.g. by opening windows).

Green tea bags used as absorbent 'pillows' affixed

to the wound dressing with porous tape have been found to be effective and are less expensive than other commercial dressing materials (Hayashida and Yamakawa, 2021). A systematic review confirmed that green tea was as effective as metronidazole in reducing the odour of malignant wounds (Wiese et al, 2021).

It is important to make sure, before using any odour-concealing items, that the individual can tolerate their smell, particularly if it is strong (Black and Berke, 2020). Individual preference plays a huge role: for example, some people may like ideas such as aromatherapy, while others may not be keen. Scent can also be powerful in evoking feelings and memories for the patient and their family and friends, so it may be beneficial to consider changing the scent of any perfumed odour-masking items from time to time.

Wounds in the maxillofacial region result in specific challenges due to the proximity to the nose and links between taste and smell (Luo et al, 2022). Honey dressings are a consideration in this region, so that this adds a more pleasant smell and taste; however, care should be taken around honey dressings' debridement properties and the risk of bleeding.

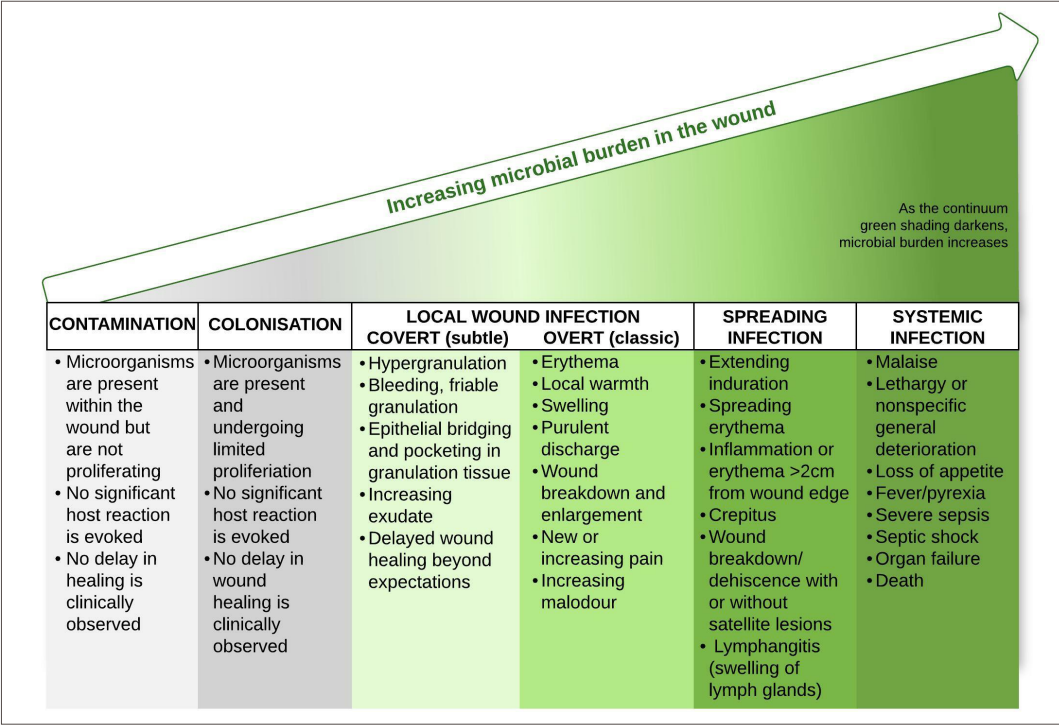
Infection risk

Many malignant wounds present ideal conditions for infection to develop. Equally, there is greater difficulty in diagnosing infection in malignant wounds since they often emit malodours, exudate, and necrosis, which are commonly associated with infection, and their clinical signs are not indicative of bacterial imbalances in the same way (Fromantin et al, 2023).

As with all wounds at risk of infection, the focus should be on prevention wherever possible. The International Wound Infection Institute (IWII) guidelines on infection should be followed, using the wound infection continuum to assess the level of infection and act accordingly (see [Figure 2](#); IWII, 2022).

Swabbing should only be recommended in cases where systemic signs of infection are present. It is worth noting, in malignant wounds, individuals may be immunocompromised, which requires particular vigilance for infection, with early signs identified and

Figure 6: IWII wound infection continuum (IWII, 2022)



treated before systemic infection sets in.

Topical antimicrobial application and antimicrobial dressings can be used to alleviate some of the symptoms associated with the localised infection (O'Neill et al, 2022).

Pain

Individuals with malignant wounds often report multiple symptoms, and pain is one of the most common and distressing among them; despite it being such a common issue, it has been reported that almost half of all patients with cancer still receive inappropriate care for pain (Faria et al, 2021).

Pain may need to be dealt with both systemically, and topically to the wound. Radiotherapy may be proposed for pain control but is associated with serious side effects (often affecting the skin) so decision-making always needs careful consideration related to benefit versus harm and must involve the individual and their family (Faria et al, 2021).

In terms of wound care, ensuring pain-free dressing

Box 3. Angiogenesis (Lugano et al, 2020; Nishida et al, 2006)

Tumours stimulate the formation of new blood vessels (angiogenesis) to supply nutrients and oxygen for their growth. However, this process is often disorganised and inefficient, leading to the formation of fragile, leaky blood vessels within the tumour. These abnormal blood vessels contribute to the friability and bleeding often associated with malignant wounds; this type of bleeding is likely to be low-volume but constant.

change is a priority, as well as preventing further damage such as skin stripping. Non-adherent dressings may reduce the risk of pain and additional skin damage. Dressing change technique and strategies such as soaking adhered dressings or using dressing adhesive removal products should be considered. Using additional products to protect the skin, such as barrier products, may be useful, particularly where the skin may be fragile and at risk of additional damage.

Prescribed analgesia prior to dressing change should

also be considered where necessary and appropriate (Kirkcaldy et al, 2023). Communicating openly with the individual about their pain levels and how these need to be managed is key.

It is important to balance the risk and benefits of pain management. For example, if the individual is already on large amounts of analgesia for other symptoms, further analgesia may not be advised; drowsiness may also be a consideration. Distraction techniques may be useful to help with pain at dressing change when additional analgesia cannot be used (Brown, 2014).

Bleeding

Bleeding is a significant issue in malignant wounds. The level and type of bleeding may vary hugely and be for different reasons. Bleeding in these wounds may be due to friable tissue, angiogenesis [Box 3], or – in rare cases – may result in catastrophic bleeding. However, the presence of at least one incident of minor bleeding significantly increases the risk of more severe bleeding (Nicodeme et al, 2021).

It is crucial that both staff and individuals affected (and their family/carers) are informed and educated about the different types of bleeds appropriately to that person's risk, and how this will be managed in practice. See section below for more information on catastrophic bleeding. It is useful to note that, if the tumour is vascular, this does not mean there will necessarily be a catastrophic bleed. Catastrophic bleeding is rare, but challenging for all involved.

Managing the risk of bleeding is a key factor and, wherever possible, the risk of bleeding can be reduced or minimised. For example, debridement – and particularly sharp debridement – should not be routinely carried out in malignant wounds, due to the risk of bleeding. Debridement is contraindicated in these wounds, unless assessed and recommended by a specialist.

This should also influence dressing choice, as dressings that encourage autolytic debridement should not be used – for example, honey dressings may be suited to managing some aspects of malignant wounds, but may need to be used with caution due to their inherent debriding properties.

There is some evidence that a 100% chitosan dressing with bioactive microfibre gelling technology are suitable for use in malignant wounds where bleeding is an issue, while facilitating gentle debridement and minimisation of odour as a result of removing the bacterial load from the wound (Pramod and Rice, 2023).

Polypharmacy is an issue for individuals who are dealing with a cancer diagnosis. This may affect many aspects of the individual's health and wellbeing, as well as having a bearing on their skin health and the wound itself. For example, many patients with cancer are prescribed anticoagulants, so it is important to assess the risk-benefit profile of any medications when the individual has a wound and bleeding may be an issue.

Catastrophic bleeding

Catastrophic bleeding – or massive haemorrhage – is when an individual loses a lot of blood and goes into shock, which is a rare but life-threatening emergency that can cause the individual to deteriorate very quickly. It can be distressing for individuals affected, those close to them, and health professionals. Rarely, a massive haemorrhage from an artery can cause the person to die, which is a terminal haemorrhage (Marie Curie, 2021).

Catastrophic bleeding may be caused by the tumour itself – for example, if cancer spreads into a blood vessel – or by the whole-body effects of cancer, such as impaired blood clotting. Some treatments and medications can increase the risk, including:

- Non-steroidal anti-inflammatory drugs (NSAIDs)
- Steroids, such as dexamethasone
- Anticoagulants, including warfarin and low-molecular weight heparin
- Radiotherapy
- Surgery.

Individuals can haemorrhage from different parts of the body, but some anatomical areas present greater risk than others, and patients with advanced cancer are at increased risk.

All patients with cancer may lose small amounts

of blood, which is not considered a massive haemorrhage and would not be dealt with as an emergency. However, this can sometimes be a warning of a larger bleed, so it is important to monitor and document any bleeding.

Early signs that an individual may be at risk of a catastrophic bleed include:

- Haemoptysis (coughing up blood)
- Haematemesis (vomiting blood)
- Melaena (dark, tarry faeces caused by internal bleeding in the stomach or small intestine)
- Haematuria (blood in the urine)
- Unexplained bleeding from ulcers, tumours, or wounds on the skin.

If an individual is at risk, it may be important to have some difficult conversations in advance about their wishes if a catastrophic bleed occurs; for example, how they would like to be cared for in an emergency, including honest conversations about circumstances under which resuscitation may or may not be possible.

If catastrophic bleeding occurs, it is vital to:

- Get help immediately; call 999 if the individual wishes to be resuscitated (doesn't have a DNACPR in place)

- If the individual has been prescribed anticipatory medicine (for use in case of emergency) and the clinician/carer is qualified to give it, administer the sedation; if the clinician/carer is not qualified, call someone who can give it
- Try to stay calm and reassure the individual and anyone else present, explaining what is happening if you can
- Stay with the individual and keep talking to them; staying with them is more important than leaving them to get medication
- Put the individual in the recovery position if appropriate
- If you can, apply pressure to the bleeding point, using dark-coloured towels; recommend to people at risk and their families to have dark-coloured towels available if possible, to help mask the amount of blood being lost (Marie Curie, 2021).

Managing a catastrophic bleed can be distressing or traumatic for everyone involved so, if this occurs in practice, it is important for all staff to seek support if needed.

Summary and conclusions

Malignant wounds can be a devastating complication of cancer, having a huge effect on the individual's quality of life and with the potential to cause life-threatening incidents such as catastrophic bleeding.

These wounds present a unique challenge in practice that can be distressing for both the individuals affected and the clinicians working with them.

It is important to be sensitive around language and reactions, as these wounds can be very upsetting for patients and have a significant effect on their mental and physical health.

Malignant wounds are unlike any other type of wounds and, as such, require specific consideration

based on the individual circumstances. Malignant wounds may be associated with end-of-life, which means the aims of treatment may be different.

It is vital for all clinicians to take time to self-care when dealing with these difficult wounds, and reflecting on how - if they get it right for the patient and their caregivers - delivering care to these patients can make a huge difference and be so rewarding.

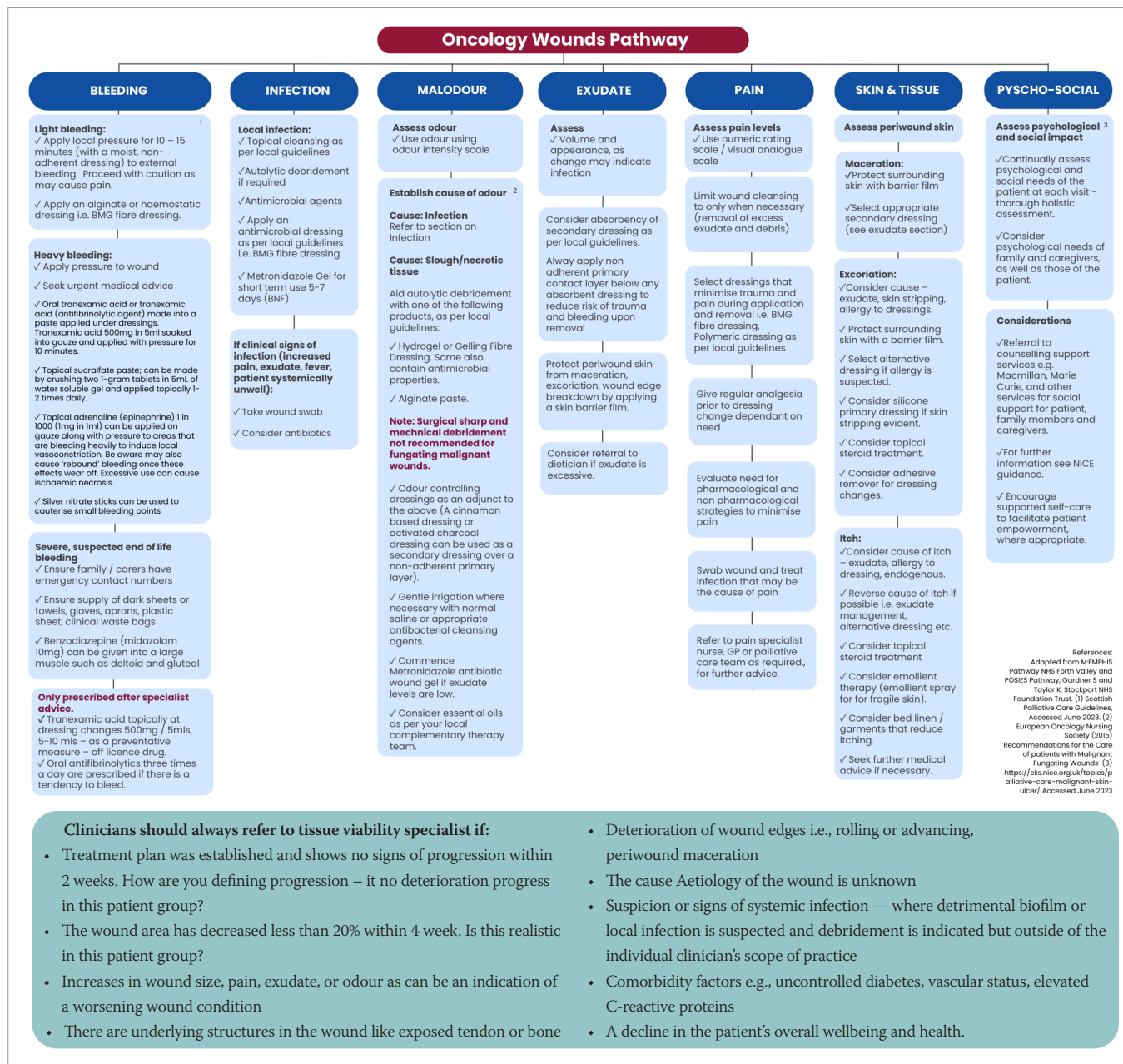
Quality of life is key, as is patient communication, listening and respecting the individual's needs, preferences and wishes. Awareness and education for patients, their carers, friends and family, and clinicians is needed in this unique and challenging area of care.

References

- Alexander S (2009) Malignant fungating wounds: epidemiology, aetiology, presentation and assessment. *J Wound Care* 18(7):273-6
- Black J, Berke C (2020) Ten top tips: Managing wound odour. *Wounds International* 11(4): 8-11
- Brown A (2014) Strategies to reduce or eliminate wound pain. *Nursing Times* 110 (15): 12-5
- Cancer Research UK (2024) Cancer incidence for all cancers combined. Available online at: www.cancerresearchuk.org/health-professional/cancer-statistics/incidence/all-cancers-combined (accessed 16.04.2024)
- Cornish L (2019) Holistic management of malignant wounds in palliative patients. *Br J Community Nurs* 24(Sup9):S19-23
- Dayell M, Garris CS, Laughney AM (2021) Cancer metastasis as a non-healing wound. *British Journal of Cancer* 124: 1491-502
- Dhoonmoon L, Fletcher J, Atkin L et al (2021) Best practice statement. Addressing skin tone bias in wound care: assessing signs and symptoms in people with dark skin tones. *Wounds UK*
- Dhoonmoon L, Nair HKR, Abbas Z et al (2023) Wound care and skin tone: Signs, symptoms and terminology for all skin tones. *Wounds International*
- Faria C, Branco V, Ferreira P et al (2021) Total pain management and a malignant wound: The importance of early palliative care referral. *Cureus* 13(12): e20678
- Firmino F, Ferreira SADC, Franck EM et al (2020) Malignant wounds in hospitalized oncology patients: Prevalence, characteristics, and associated factors. *Plast Surg Nurs* 40(3): 138-44
- Fromantin I, Seyer D, Watson S et al (2013) Bacterial floras and biofilms of malignant wounds associated with breast bacterial floras and biofilms of malignant wounds associated with breast cancers. *J Clin Microbiol* 51(10): 3368-73
- Furka A, Simkó C, Kostyál L et al (2022) Treatment algorithm for cancerous wounds: a systematic review. *Cancers (Basel)* 14(5): 1203
- Gardner S, Taylor K (2020) POSIES clinical pathway for malignant/fungating wounds. Available online at: <https://medicinesmanagement.doncasterccg.nhs.uk/wp-content/uploads/2023/07/Posies-Clinical-Pathways-for-Malignant-Fungating-Wounds-v2-2024.pdf> (accessed 19.06.2024)
- Hayashida K, Yamakawa S (2021) Topical odour management in burn patients. *Burns Trauma* 9: tkab025
- International Wound Infection Institute (2022) Wound infection in clinical practice: principles of best practice. *Wounds International*
- Kirkcaldy AJ, Wilson M, Cooper R et al (2023) Strategies for reducing pain at dressing change in chronic wounds: protocol for a mapping review. *BMJ Open* 13(10): e072566
- Lo S-F, Hu W-Y, Hayter M et al (2008) Experiences of living with a malignant fungating wound: a qualitative study. *J Clin Nurs* 17(20): 2699-708
- Lugano R, Ramachandran M, Dimberg A (2020) Tumor angiogenesis: causes, consequences, challenges and opportunities. *Cell Mol Life Sci* 77(9): 1745-70
- Luo B, Xiao Y, Jiang M et al (2022) Successful management of exudate and odor using a pouch system in a patient with malignant facial wound: A case report. *Asia Pac J Oncol Nurs* 9(4): 236-241
- Macmillan Cancer Support (2020) Ulcerating cancer wounds. Available online at: www.macmillan.org.uk/cancer-information-and-support/impacts-of-cancer/ulcerating-cancer-wounds (accessed 16.04.2024)
- Macmillan Cancer Support (2024) Cancer statistics in the UK. Available online at: <https://www.macmillan.org.uk/about-us/what-we-do/research/cancer-statistics-fact-sheet#references> (accessed 14.06.2024)
- Marie Curie (2021) Massive haemorrhage in palliative care. Available online at: <https://www.mariecurie.org.uk/professionals/palliative-care-knowledge-zone/recognising-emergencies/massive-haemorrhage> (accessed 17.04.2024)
- National Institute for Health and Care Excellence (2024) Prescribing in palliative care
- Nicodeme M, Dureau S, Chéron M et al (2021) Frequency and management of hemorrhagic malignant wounds: a retrospective, single-center observational study. *J Pain Symptom Manage* 62(1): 134-40
- Nishida N, Yano H, Nishida T et al (2006) Angiogenesis in cancer. *Vasc Health Risk Manag* 2(3): 213-9
- Olsson M, Jarbrink K, Divakar U et al (2019) The humanistic and economic burden of chronic wounds: a systematic review. *Wound Repair Regen* 27(1): 114-25
- O'Neill L, Nelson Z, Ahmad N et al (2022) Malignant fungating wounds of the head and neck: Management and antibiotic stewardship. *OTO Open* 6(1): 2473974X211073306
- Palliative Care Formulary (2022) PCF8. Pharmaceutical Press
- Pramod S, Rice S (2023) Management of malignant fungating wounds with a bioactive microfibre gelling technology dressing: an evaluation. *Wounds UK* 19(4): 68-77
- Probst S, Arber A, Faithfull S (2013) Malignant fungating wounds: the meaning of living in an unbounded body. *Eur J Oncology Nurs* 17(1): 38-45
- Schultz GS, Sibbald RG, Falanga V et al (2003) Wound bed preparation: a systematic approach to wound management. *Wound Repair Regen* 11: 1-28
- Schultz V, Triska OH, Tonkin K (2002) Malignant wounds: Caregiver-determined clinical problems. *J Pain Symptom Manage* 24(6):572-7
- Society and College of Radiographers (2020) Radiation dermatitis guidelines for radiotherapy healthcare professionals. Available online: https://www.sor.org/getmedia/6cc80174-4478-4cd2-b501-35b41aae820d/2020_version_4_final_practice_guideline_radiotherapy_skin_care_llv1.pdf_2 (accessed 14.06.2024)
- Starace M, Carpanese MA, Pampaloni F et al (2022) Management of malignant cutaneous wounds in oncologic patients. *Support Care Cancer* 30(9): 7615-23
- Tilley CP, Fu MR, Qiu JM et al (2021) The microbiome and metabolome of malignant fungating wounds: a systematic review of the literature from 1995 to 2020. *J Wound Ostomy Continence Nurs* 48(2): 124-35
- Tilley CP, Lipson J, Ramos M (2016) Palliative wound care for malignant fungating wounds holistic considerations at end-of-life. *Nurs Clin North Am* 51(3): 513-31
- Vardhan M, Zia Flaminio Z, Sapru S et al (2019) The microbiome, malignant fungating wounds, and palliative care. *Front Cell Infect Microbiol* 9: 373
- Wiese F, Kutschan S, Doerfler J et al (2021) Green tea and green tea extract in oncological treatment: a systematic review. *Int J Vitam Nutr Res* 17: 1-13
- Woo KY (2010) Wound-related pain: anxiety, stress and wound healing. *Wounds UK* 6 (4): 92-8
- World Union of Wound Healing Societies (2019) Wound exudate: Effective assessment and management.

Appendix: Resources and pathways for use in practice

Multidisciplinary team approach to cancerous wounds (from Pramod and Rice, 2023)



POSIES support pathway for malignant wounds (Gardner and Taylor, 2020)

POSIE's Clinical Pathway for Malignant/Fungating Wounds



Definition - A fungating wound develops as a result of direct infiltration of the skin, mucosa, blood and lymph vessels caused by a local tumour in which metastatic deposits from a distant primary site or from a primary skin tumour example being squamous cell carcinoma, basal cell carcinoma and a melanoma. (McMurray, 2003).

Pain (wound specific)	Odour	Skin	Infection	Exudate and Bleeding	Self
Pain can depend upon: - Wound location - Wound depth and tissue invasion - Nerve damage - Macerated skin - Inflamed skin - Dressing changes.	Odour occurs when the tissue on the wound has been deprived of oxygen and nutrients and becomes necrotic with bacterial growth on the tissue. The psychological effects may impact the patients quality of life.	The skin surrounding the wound can become sore and macerated due to exudate and frequent dressing changes. It can also become very itchy related to the tumour growth.	These wounds are at high risk of developing infection as the blood supply to the tumour is out grown which results in a necrotic area which can act as a medium for anaerobic bacterial infection.	Exudate is due to tissue damage and increased leakage from blood vessels and can vary in amount. Bleeding can be due to abnormal microcirculation, erosion or compression of blood vessels by the tumour or decreased platelet function. It can also be caused by dressings adhering to wounds.	These wounds can develop an array of emotions and psycho-social needs. Depression, anxiety, low self-esteem and loss of sexual intimacy are among some of the needs expressed by patients. It is important for the patient to feel supported.
Management					
- Ask the patient to describe his/her current level of pain - Choose dressings that minimise trauma and pain during application and removal - Give analgesia continually/ prior to dressing changes - Evaluate need for pharmacological and non-pharmacological strategies to minimise wound pain - Swab and treat infection - Refer to pain specialist nurse, palliative care team or GP for further advice.	- Undertake wound cleansing in accordance with Pathway for Wound Cleansing. - Consider using the Flaminal product range to aid autolytic debridement for devitalised tissue. - Antimicrobial skin preparations can be used in the short term to decrease the malodour from fungating wounds if the exudate levels are low. - Dressings with activated charcoal may assist with the management of malodour. - Increase dressing changes if necessary. - Consider using essential oils and an onward referral to the Complementary Therapy Service at St John's Hospice.	- Protect the surrounding skin with a barrier protectant film in accordance with the Doncaster Wide Wound Care Formulary. - Consider the use of topical steroids, oral antihistamines and/or onward Dermatology referral. - Consider the cause e.g. exudate, skin stripping or allergy to dressings. - Select an alternative dressing - Consider using silicone dressings and the use of an adhesive remover.	- Undertake wound cleansing in accordance with Pathway for Wound Cleansing. - If there are clinical signs of infection, take a wound swab, consider antibiotics (only if the patient is unwell). - Refer to the Pathway for Wound Infection for further information around product selection.	- Assess volume and appearance as this may indicate infection. - Protect the surrounding skin with a barrier protectant film in accordance with the Doncaster Wide Wound Care Formulary. - Apply an Atrauman to reduce the risk of trauma/risk of bleeding. - Consider the absorbency of the secondary dressing. E.g. Biatain Silicone 3DFIT. - Refer to the Dietitian. Bleeding Light - Apply pressure for 10 – 15 minutes with a moist non-adherent dressing and apply a haemostatic dressing. E.g. Kaltostat. Bleeding Heavy - Apply pressure to the wound and seek urgent medical advice (this is an emergency situation). - Admission to hospital may be necessary depending on the stage of illness and the patient's wishes.	- Continually assess the psychological and social needs of the patient during each visit/appointment. - Discuss patient options for onward referral to support services i.e. the Complementary Therapy Service at St John's Hospice Doncaster.

Notes



