

Oral Mucositis

ABOUT ORAL MUCOSITIS¹ Oral mucositis refers to ulcerative lesions and inflammation of the oral mucosa often observed in patients undergoing chemotherapy and/or radiotherapy for the treatment of cancer.

This common and debilitating complication of cancer treatment causes pain, nutritional problems as a result of inability to eat, and an increased risk of infection due to open sores in the mouth.

CAUSES AND RISK FACTORS²

Radiation and chemotherapy not only destroy cancer cells, but also damage healthy cells, such as those in the lining of the mouth and the digestive tract.

The likelihood of developing oral mucositis depends on the treatment regimen recommended for an individual patient's cancer.

The risk of developing oral mucositis increases when patients are treated with a combination of chemotherapy and radiotherapy.

Some chemotherapy treatments, doses and schedules are more likely to result in oral mucositis.

Oral mucositis generally begins 5-10 days following the initiation of chemotherapy and lasts anywhere from one week to six weeks or more.¹

Oral mucositis is likely to occur in:

- up to 100% of patients receiving head and neck radiotherapy^{2,3}
- up to 100% of patients undergoing high dose chemotherapy with hematopoietic stem cell transplantation⁴
- between 20-40% of patients receiving conventional chemotherapy.³

Factors that can increase the likelihood of developing mucositis, or that can make it worse if it does occur, include:¹

- poor oral or dental health
- smoking or chewing tobacco
- drinking alcohol
- gender (females appear to be more likely than males to develop mucositis)
- dehydration
- low body mass index
- diseases such as kidney disease, diabetes or HIV/AIDS
- previous cancer treatment

- chronic irritation from ill-fitting dentures/plates
- dry mouth (hyposalivation) prior to and during treatment
- age - younger patients tend to develop oral mucositis more often than older patients.

SIGNS AND SYMPTOMS¹

The oral side effects associated with chemotherapy and radiotherapy can have a severe impact on patients' lives and also their treatment. Cancer patients experiencing chemotherapy-associated oral mucositis may suffer oral or throat pain, together with impaired oral function.

Signs and symptoms of oral mucositis include:

- red, shiny or swollen mouth and gums
- blood in the mouth
- sores in the mouth, gums or tongue
- soreness or pain in the mouth or throat
- difficulty swallowing or talking
- dry mouth, mild burning or pain when eating food
- soft, whitish patches or pus in the mouth or on the tongue
- increased or decreased mucus or thicker saliva in the mouth.

One of the most troubling consequences of oral mucositis is the impact it can have on maintaining optimal nutrition. The associated pain makes it very difficult for a patient to eat, drink and swallow. This can result in sub-optimal nutrition and hydration.

Oral mucositis can develop to the extent that a patient requires hospitalisation for opiate pain relief, tube feeding, and intravenous antibiotics and hydration. Oral mucositis is one of the most frequent causes of treatment delay and dose reduction in cancer therapy.²

EXPERT OPINION



PROFESSOR DOROTHY KEEFE

Internationally regarded mucositis expert Professor Dorothy Keefe says managing this extremely debilitating condition is completely central to managing cancer patients properly.

“Pretty much every cancer agent can cause some degree of mouth or gut damage. But it all depends on which drugs and what doses you are using. The range of incidence is from as low as 10% for one drug to as high as 60% for another drug. If you are using a high-risk drug or you are using head and neck radiotherapy it certainly goes up towards 100%.

Oral mucositis is quite debilitating, because pain in your mouth, or ulceration in your mouth, makes it hard to eat and to swallow. So, what happens is you get malnutrition and you get pain and both of those have an impact on your quality of life, so it can be a really big deal. There are some patients, particularly in the head and neck cancer area, who have to have naso-gastric feeding during their treatment because of their mucositis.

Head and neck cancer patients and lung cancer patients are particularly prone to weight loss anyway and the mucositis just adds to that. How much is due to the mucositis is hard to determine, but people can lose 5-10% of their body weight if they are badly affected.

In this era of personalised cancer medicine, we need to look at the tumour AND the patient. It's about holistic care for the patient and that is what people want, ultimately, including the management and prevention of oral mucositis. ”

Professor Dorothy Keefe, August 2016.



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ORAL MUCOSITIS MANAGEMENT^{1,5}

Good oral health is important in preventing and managing oral mucositis and might include the following recommendations:

- Brush, floss, rinse and moisturise mouth regularly and routinely
- Use a soft toothbrush that is regularly replaced, brushing for at least two minutes
- Avoid using toothpastes with whitening agents or tartar control agents. Use toothpaste for sensitive teeth
- Perform mouthwashes with saline solutions or sodium bicarbonate as this can be helpful in alleviating dry mouth and keeping the mouth clean
- If you wear dentures, make sure your dentures fit properly and remove them whenever possible to expose gums to air. Do not wear dentures if you develop severe mouth sores
- Use lip moisturisers, but avoid using Vaseline, as the oil base can promote infection or burns caused from radiation treatment
- Report oral pain to your doctor or nurse
- See your healthcare provider if you experience excessive bleeding of the gums, as this may be a sign your platelet count is too low.
- Attend dental appointments before, during and after cancer treatment
- Maintain hydration
- Avoid alcohol, as well as products containing alcohol. These can cause a burning sensation and irritate sensitive areas in your mouth. Certain prescription rinses may also contain alcohol, so be sure to check with your healthcare provider before using
- Use sugarless products
- Avoid foods that are too hot, spicy, acidic or abrasive as well as excessively acidic fruit and beverages
- Refrain from smoking. If necessary, get help to quit.

There are many different treatments used to prevent or treat mucositis, including topical anaesthetics, mouthwashes and coating agents. Patients may also require comprehensive pain management and antibiotics.



Meet
Julie

Accomplished Australian comedian and journalist Julie McCrossin had frequently hosted and entertained medical professionals at major international cancer conferences. Then she was diagnosed with Stage 4 oropharyngeal cancer that had spread to her lymph nodes. She endured chemotherapy and radiation therapy which saved her life, but caused debilitating oral mucositis.

“ I was diagnosed in 2013. Most throat cancers are caused by alcohol and tobacco, but mine was caused by the human papillomavirus (HPV). The primary site was on my tonsils, on the back of my tongue and on the side of my throat. My treatment was 30 consecutive days of radiation therapy. This meant a 20 minute radiation session every day, plus weekly chemotherapy. Basically, when you have radiation, you cook from the inside out. The impact on the inside of my mouth was catastrophic.

I lost over 20 kilograms in six weeks. That is a common issue with oral cancers. I didn't get tube fed. I kept taking nutrition orally, but was on liquid food for a number of weeks. I was able to keep swallowing enough liquid food to stay alive, basically. The inside of my mouth became very burnt. Under your tongue there are little lines of flesh and they swelled up like great big fingers of swollen soft flesh. My mouth was traumatised. It was very sore inside, I had ulcers, flesh sloughed off. It took a good six months before my mouth was anything close to normal.

I was putting a lot of products in my mouth for pain relief. The single product that gave me the greatest relief was Gelclair. It provided a coating that soothed my traumatised mouth. I actually felt it was helping me to start the road to recovery because I felt better. These days, I am much, much better, I am back working normally and I eat normally. I lost the capacity to sing, and I used to have quite a nice voice. It's not my old voice, but I can speak. I am an example of radiation and chemotherapy being absolutely worth the effort. ”

Julie McCrossin, September 2016

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