

Management of mucositis in cancer and haematology nursing



**ASSIGN
BUSTER**

Oral mucositis is identified as erythema and inflammation leading to ulceration of the mucosa (Murphy, 2007). Sonis, 2007: 3 discusses the pathobiology of mucositis in “ five phases: initiation, the primary damage response, signalling and amplification, ulceration and healing”. Mucositis’ onset, which may be exacerbated by concurrent chemotherapy, may be observed 7-15 days after the commencement of therapy (Maher in Yarbro p 297), and resolution in healing may take up to three months after the completion of combined modality treatment (Hass & Kuehn, 2001). IN MANUAL FOR RONP & E p 86

Mucositis affects the oral cavity, oropharynx, hypopharynx, and larynx (Silverman, 2007: 13). It is a consequence of head and neck radiation therapy, most particularly those receiving chemotherapy concurrently. It varies in symptoms from oral discomfort and progresses to pain when eating, dysphagia associated xerostomia, taste alterations, weight loss, weakness, depression, higher risk of infection, alterations in quality of life, and enhances health care costs (Silverman, 2007). Key risk factors in developing mucositis whilst receiving radiation therapy are: site (anatomy) specific, volume, dose, fractionation, and shielding methods used (Sitton, 1992)

Management strategies for mucositis will begin prior to the patient commencing treatment. Health promotion through education and early intervention concerning risk factors is important for these patients in the prevention of exacerbating symptoms schedule (Maher in Yarbro p 297). Risk factors such as alcohol consumption and smoking, immunosuppression, ill fitting dentures, decaying or loose teeth, xerostomia and any type of

<https://assignbuster.com/management-of-mucositis-in-cancer-and-haematology-nursing/>

infection will significantly impact on the severity of symptoms and need to be addressed prior to the commencement of treatment (Berger & Kilroy 2001). Prior to treatment, included in the patients care plan will be referrals to the multi disciplinary team including dentistry and dietitian to address the risk factors to enable them to comply with the treatment schedule (Maher in Yarbro p 297).

In advanced symptom management of mucositis the nurse is required to make a comprehensive and accurate assessment of the whole patient, not solely focusing on the symptom itself. The patient requires frequent (at least weekly) ongoing assessment and inspection of the oral cavity (Maher in Yarbro p 297). Patients receiving adjuvant or concurrent radiation therapy and chemotherapy to the head and neck will require ongoing support, assessment and communication with the patient. This is vital for preventing and managing patient side effects (Bensinger et al., 2008) and has proved to be of benefit in patients completing their course of treatment (Armstrong and McCaffrey, 2006)

Tool of assessment

Diagnosis of mucositis requires skillful training (Silverman, 2007). Holistic nursing care in the management of mucositis becomes problematic when there is inadequately trained staff and no standardized assessment tool available (Eilers and Epstein, 2004). A variety of scoring tools exist, such as World Health Organisation(WHO) Grading System, the National Cancer Institute (NCI), the Common Toxicity Criteria (CTC), the Common Terminology Criteria for Adverse Events (CTCAE) and the Radiation Therapy Oncology Group (RTOG) (Tomlinson et al., 2007). Implications on practice are <https://assignbuster.com/management-of-mucositis-in-cancer-and-haematology-nursing/>

that different measurement scales have different values and levels which can effect interventions and oral care protocols. An instrument that measures the right things accurately will guide consumers in their selection (Eilers and Epstein, 2004). The literature recommends the uses of an assessment tool that is valid and reliable, even in the absence of a standardized one (Eilers and Epstein, 2004 p2).

Documenting a comprehensive and accurate assessment of the patient with mucositis includes:

Time of onset and duration of symptoms

The extent of the symptoms

Is there evidence of fungal or bacterial infection?

Are they experiencing dysphagia?

Is their skin dry, are they dehydrated?

Have they been able to eat? weigh the patient to determine weight loss

What is their pain score and how is their pain being managed?

Are their bowels functioning regularly?

Are they on chemotherapy?

Taking a set of observations will determine if the patient is febrile, if so blood cultures, full blood chemistry and essay are required

Bloods should also be taken throughout their treatment to check their HB levels. (Radiosensitivity is higher in oxygenated cells (Sitton, 1992), therefore radiation therapy is more effective if the Hb is above 100.

Ask the patient how they are feeling, are there signs of depression?

These questions are what the nurse should be asking to make a full and proper assessment of the patient. (Bruner et al., 2005) BRUNER, D., HAAS, M. & GOSSELIN-ACOMB, T. 2005 (Sitton, 1992)

Intervention and Outcomes

After assessing the patient, interventions and recommendations required to assist the patient in managing their side effects can be made depending on the severity of the mucositis and the overall health status of the patient.

Nurses will continually evaluate and re-assess throughout the course of patient symptom management. This may involve administering IV fluids and or antibiotics, giving liquid and transdermal pain relief, taking swabs, reaffirming education on appropriate diet, organising the placement of a percutaneous endoscopic gastrostomy (PEG) tube or simply advising good oral hygiene (Maher K in Yarbro p 297). At all stages of mucositis, patients should be encouraged to maintain good oral hygiene, including, brushing with a soft brush at least twice daily, flossing once a day using frequent bland rinses and oral moisturisers will assist in the reduction of discomfort to the patient (Bensinger, Schubert, Ang, Brizel, Brown, Eilers, Elting, Mittal, Schattner, & Spielberger, 2008: 7-9). Yarbro p 297 recommends 1teaspoon salt and / or 1 teaspoon bi carbonate soda in 1000 mls of water.

The availability of multiple products in prevention and treatment of oral mucositis are limited. A literature review of twenty five articles suggests that recently approved mouth washes and topical anesthetics as discussed by Bensinger et al (2008: 13) are comfort measures only and have proven not to prevent mucositis. Antimicrobials, anti-inflammatory, targeted therapies and natural remedies as yet have had insufficient studies in well designed clinical trials to support their approval and use in head and neck cancer patients receiving adjuvant or concurrent radiation therapy and chemotherapy (Posner and Haddad, 2007). In the absence of being able to prevent mucositis, comfort measures continue to be used to assist in alleviating distressing symptoms. After treatment supportive care by nursing staff, community nurses, speech therapists and dietitians will enhance recovery of the patient as they may suffer long term functional problems as consequences of treatment (Rosenthal and Trotti, 2009 p 33).

Conclusion

Advanced symptom management of mucositis in cancer and haematology nursing as been discussed. To clearly identify mucositis it is important to be adequately trained and to have a standardised scoring tool. Health promotion and supporting patients throughout their treatment to manage their mucositis is important to enable them to experience/maintain their quality of life and to complete treatment. Although many oral solutions offer comfort measures, none have proven superior in minimising mucositis and standard oral hygiene measures were recommended. Clearly more research is required into preventative measures as mucositis has an increasing impact on clinical and economical outcomes.