Oral health is an important component of individual health, and any alteration will reflect directly on quality of life (Eilers & Milloin, 2011). Therefore, different oral care protocols and strategies were established for patients with cancer to prevent and minimize oral mucositis. Oral cryotherapy is one of the recent modalities used to prevent and manage oral mucositis. The purpose of this review is to clarify the cryotherapy effect on oral mucositis severity among patients receiving myeloablative conditioning followed by BMT. A literature search was performed using six different electronic databases: CINAHL®, MEDLINE®, Nursing Ovid, PubMed, Springer, and Science Direct. Six articles were deemed relevant and included in this review. Oral mucositis increases mortality rate, length of hospital stay, opioid use, and the need for parenteral nutrition usage. It also decreases patient’s quality of life and his or her desire to complete treatment. However, oral cryotherapy significantly minimizes the incidence and severity of oral mucositis and decreases secondary oral mucositis complications. Using oral cryotherapy concurrently with a regular oral care protocol can improve its efficacy for preventing and managing oral mucositis. Additional studies should be conducted to create standard oral cryotherapy protocols.

Abdel-Qader Mahmoud Tayyem, RN, MSN, is a clinical resource nurse at the King Hussein Cancer Center in Amman, Jordan. The author takes full responsibility for the content of the article. The author did not receive honoraria for this work. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the author, planners, independent peer reviewers, or editorial staff. Tayyem can be reached at a_tayyim@yahoo.com, with copy to editor at CJONEditor@ons.org. (Submitted February 2013. Revision submitted September 2013. Accepted for publication October 11, 2013.)

Key words: cryotherapy; oral cryotherapy; myeloablative; bone marrow transplantation; hematopoietic stem cell transplantation; oral mucositis; prevention

Digital Object Identifier: 10.1188/14.CJON.E84-E87

Oral mucositis is a distressing toxic effect of cancer therapy and one of the major side effects of the myeloablative conditioning used to prepare patients for bone marrow transplantation (BMT). Oral cryotherapy is one of the recent modalities used to prevent and manage oral mucositis. The purpose of this review is to clarify the cryotherapy effect on oral mucositis severity among patients receiving myeloablative conditioning followed by BMT. A literature search was performed using six different electronic databases: CINAHL®, MEDLINE®, Nursing Ovid, PubMed, Springer, and Science Direct. Six articles were deemed relevant and included in this review. Oral mucositis increases mortality rate, length of hospital stay, opioid use, and the need for parenteral nutrition usage. It also decreases patient’s quality of life and his or her desire to complete treatment. However, oral cryotherapy significantly minimizes the incidence and severity of oral mucositis and decreases secondary oral mucositis complications. Using oral cryotherapy concurrently with a regular oral care protocol can improve its efficacy for preventing and managing oral mucositis. Additional studies should be conducted to create standard oral cryotherapy protocols.