Light Therapy Helps Prevent Mouth Sores During Cancer Treatment [VIDEO]

A worldwide coalition of researchers and clinicians find it is the most effective method for those with head and neck cancer.

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Has your cancer treatment caused you to develop oral mucositis—a common side effect of chemotherapy and radiation therapy that results in painful ulcers and swelling of the mouth? In February, Cancer Health reported that scientists were testing light therapy as a replacement for opioids in treating mucositis.

Now, new guidelines developed by the Multinational Association of Supportive Care in Cancer (MASCC) and the International Society of Oral Oncology (ISOO) and published in the journal Supportive Care in Cancer have confirmed that light therapy, which uses artificial light to treat various conditions, is one of the most effective ways to prevent these agonizing mouth sores in people with head and neck cancer, according to a University at Buffalo press release.

The guidelines recommend a form of low-dose light therapy known as photobiomodulation (PBM) therapy. It has previously been found to be effective in treating pain and in the stimulation of healing in hundreds of clinical trials, as reported in thousands of academic papers. Global experts reviewed more than 30 papers to come to their conclusion.

The new guidelines are as follows:

- The panel recommends the use of intraoral PBM using low-level laser therapy for the prevention of oral mucositis in adult patients receiving stem cell transplantation with high-dose conditioning chemotherapy, with or without total body irradiation.
- There is no guideline possible for prevention of oral mucositis in cancer patients treated with chemotherapy alone because of insufficient evidence.
- The panel recommends intraoral PBM using low-level laser therapy to prevent oral mucositis in

adults with head and neck cancer being treated with radiation therapy.

- The panel also suggests such therapy for the prevention of mucositis in those receiving both radiation therapy and chemotherapy.

“Even with the best evidence-based interventions, we don’t yet have an ultimate guideline for mucositis in all clinical settings,” said Sharon Elad, DMD, chair of the MASCC/ISOO Mucositis Study Group and a professor at Eastman Institute for Oral Health at the University of Rochester Medical Center, who led the review. “We look forward to future research to help shape a more universal implementation of photobiomodulation therapy as well as identify effective and validated protocols.”

More research must be done to determine how effective light therapy is in the management of oral mucositis among pediatric cancer patients and adults who receive only chemotherapy.

In related news, a recent study published in JAMA found that mucositis-related pain could be significantly reduced in people undergoing head and neck cancer radiation therapy with the use of mouthwash containing doxepin or diphenhydramine-lidocaine-antacid.

Among 275 patients with an oral mucositis pain score of 4 or higher on a 10-point scale, those who received doxepin mouthwash saw their pain decrease by 11.6 points during the first four hours after use while those in the diphenhydramine-lidocaine-antacid mouthwash group’s pain fell 11.7 points in that same time. This was compared with a reduction of 8.7 points in the placebo group.

“We now have two clinical trials showing that doxepin mouthwash relieved chemotherapy-related oral mucositis pain, so it should become a standard of care,” study author Terence Tai-Weng Sio, MD, MS, an assistant professor of radiation oncology and radiation oncologist at the Mayo Clinic in Phoenix, told Healio. “We also provided the first-ever evidence that the mixed mouthwash worked in a similar fashion for symptom control and relief. The study overall should be taken in a positive light.”

View the video above to learn more about how light therapy can treat mucositis. Also, click here to learn about nutrition for managing mouth sores or a sore throat during cancer treatment from blogger Danielle Penick.
