CLINICAL PRACTICE GUIDELINES FOR ORAL AND GASTROINTESTINAL MUCOSITIS

I. ORAL MUCOSITIS: FOUNDATIONS OF CARE

1. The panel suggests the use of oral care protocols that include patient and staff education should be used to attempt to reduce the severity of mucositis from chemotherapy or radiation therapy. The panel suggests that protocol development should be multidisciplinary and that the impact of the oral care and educational protocols should be evaluated. The panel suggests that the oral care protocol should include the use of a soft toothbrush that is replaced on a regular basis.

2. The panel recommends patient-controlled analgesia with morphine as the treatment of choice for oral mucositis pain in patients undergoing HSCT.

Radiotherapy: **Prevention**

3. To reduce mucosal injury, the panel recommends the use of midline radiation blocks and three-dimensional radiation treatment.

4. The panel recommends benzydamine for prevention of radiation-induced mucositis in patients with head and neck cancer receiving moderate-dose radiotherapy.

5. The panel recommends that chlorhexidine not be used to prevent oral mucositis in patients with solid tumors of the head and neck who are undergoing radiotherapy.

6. It is recommended that sucralfate NOT be used for the prevention of radiation-induced oral mucositis.

7. It is recommended that antimicrobial lozenges not be used for the prevention of radiation-induced oral mucositis.

Standard-dose chemotherapy: **Prevention**

8. The panel recommends that patients receiving bolus 5-FU chemotherapy undergo 30 min oral cryotherapy to prevent oral mucositis.

9. The panel suggests using 20-30 minute oral cryotherapy in an attempt to decrease mucositis in patients treated with bolus doses of edatrexate.

10. The panel recommends that acyclovir and its analogues not be used routinely to prevent mucositis.

Standard-dose chemotherapy: **Treatment**

11. In patients with hematological malignancies receiving high dose chemotherapy and total body irradiation with autologous HSCT, the panel recommends the use of keratinocyte growth factor-1 (palifermin) in a dose of 60 mcg/kg/day for 3 days prior to conditioning treatment and for 3 days post-transplant for the prevention of oral mucositis.

12. The panel suggests the use of cryotherapy to prevent oral mucositis in patients receiving high-dose melphalan.

13. The panel recommends that chlorhexidine not be used to treat established oral mucositis.

High-dose chemotherapy with or without TBI plus HSCT: prevention

14. The panel does not recommend the use of pentoxifylline to prevent mucositis in patients undergoing HSCT.

15. LLLT requires expensive equipment and specialized training. Because of inter-operator variability, clinical trials are difficult to conduct, and their results are difficult to compare; nevertheless, the panel is encouraged by the accumulating evidence in support of LLLT. For centers capable of supporting the necessary technology and training, the panel suggests the use of LLLT in an attempt to reduce the incidence of oral mucositis and its associated pain in patients receiving high-dose chemotherapy or chemoradiotherapy before HSCT.

CLINICAL PRACTICE GUIDELINES FOR ORAL AND GASTROINTESTINAL MUCOSITIS - CONTINUED

II. GASTROINTESTINAL MUCOSITIS

Radiotherapy: **Prevention**

1. The panel suggests using 500 mg oral sulfasalazine twice daily to help reduce the incidence and severity of radiation-induced enteropathy in patients receiving external-beam radiotherapy to the pelvis.
2. Oral sucralfate does not prevent acute diarrhea in patients with pelvic malignancies undergoing external beam radiotherapy; and, compared with placebo, it is associated with more gastrointestinal side effects, including rectal bleeding. Consequently, the panel recommends that oral sucralfate not be used.
3. The panel recommends that 5-aminosalicylic acid and its related compounds mesalazine and olsalazine not be used to prevent gastrointestinal mucositis.
4. It is suggested that amifostine in a dose of at least 340 mg/m^2 may prevent radiation proctitis in those receiving standard dose rT for rectal cancer.

Radiotherapy: **Treatment**

5. The panel suggests the use of sucralfate enemas to help manage chronic, radiation-induced proctitis in patients with rectal bleeding.

Standard-dose and high-dose chemotherapy: Prevention

6. The panel recommends either ranitidine or omeprazole for the prevention of epigastric pain after treatment with cyclophosphamide, methotrexate, and 5-Fluorouracil or treatment with 5-Fluorouracil with or without folinic acid chemotherapy.

Standard-dose and high-dose chemotherapy: **Treatment**

7. When loperamide fails to control diarrhea induced by standard-dose or high-dose chemotherapy associated with HSCT, the panel recommends octreotide at a dose of at least 100 mcg administered subcutaneously twice daily.

Combined chemotherapy and radiotherapy: **Prevention**

8. The panel suggests the use of amifostine to reduce esophagitis induced by concomitant chemotherapy and radiotherapy in patients with nonsmall cell lung cancer.
9. The panel recommends that systemic glutamine not be used for the prevention of GI mucositis.

HSCT: hematopoietic stem cell transplantation; 5-FU: 5-fluorouracil; TBI: total-body irradiation; LLLT: low-level laser therapy.

Reference: Rubenstein EB, et al. *Cancer* 2004;100:2026 - 46; updated from MASCC website available at: http://www.mascc.org/content/3.html.