



Miracle Fruit / Chemo Study Abstract

Treatment of taste alterations in chemotherapy patients using the "miracle fruit": Preliminary analysis of a pilot study.

Meeting:

2010 ASCO Annual Meeting

Category:

Patient and Survivor Care

Subcategory:

Supportive Care

Session Type and Session Title:

This abstract will not be presented at the 2010 ASCO Annual Meeting but has been published in conjunction with the meeting.

Abstract Number:

e19523

Citation:

J Clin Oncol 28, 2010 (suppl; abstr e19523)

Author(s):

H. P. Soares, M. Cusnir, M. A. Schwartz, J. F. Pizzolato, J. Lutzky, R. J. Campbell, J. L. Beaumont, D. Eton, S. Stonick, R. Lilenbaum; Mount Sinai Medical Center, Miami Beach, FL; Mount Sinai Comprehensive Cancer Center, Miami Beach, FL; Fairchild Tropical Botanic Garden, Miami, FL; Northwestern University Feinberg School of Medicine, Chicago, IL; Mayo Clinic Rochester, Rochester, MN

Background: Patients undergoing chemotherapy often complain of alterations of taste (dysgeusia), for which no conventional therapy exists. The African fruit *Synsepalum dulcificum*, or "Miracle Fruit" (MF), has been described as a powerful taste alteration product, converting sour to sweet taste. We conducted a single institution trial to assess whether the MF improves dysgeusia. **Methods:** Patients with a performance status of 2 or less, receiving cyclophosphamide, carboplatin, cisplatin, gemcitabine, methotrexate, doxorubicin, 5-fluorouracil, paclitaxel, docetaxel, vinorelbine, oxaliplatin, irinotecan or etoposide were included in the study if they complained of dysgeusia. Patients were randomized in a crossover fashion to immediately receive the MF for 2 weeks (group A) or to receive the MF after 2 weeks of supportive measures alone (group B). Endpoints were: improvement in taste (study powered to detect 30% response with MF, as measured by the Wickham questionnaire), weight changes, and quality of life. The fruit was delivered directly from the Fairchild Botanical Garden and stored at the Cancer Center under proper conditions. **Results:** From October 2008 to November 2009, 28 of the planned 40 patients were enrolled and 23 are evaluable for this analysis (12 in group A and 11 in B). The mean age is 63 years, 52% are male, and 78% have advanced disease. Nine (39%) have GI cancers, 6 breast cancer, and 8 have other cancers. At baseline, 20 (87%) individuals complained of metallic taste and 78% of no taste. The 7 follow-up visits required in the study were completed by 56% of subjects. Based on the questionnaire, 7 of 23 (30%) had improvement in taste, in addition, 8 of 23 (35%) believed that the MF was helpful. When considering at least stabilization of taste, the best response rate was 52%. There was no significant change in weight during the study. No grade 3 and 4 adverse effects were reported. Stomach ache and throat discomfort (grade 1) were reported in 1 patient each. **Conclusions:** The Miracle Fruit is safe for use in patients undergoing chemotherapy. In our preliminary analysis, the response to the MF fruit appears encouraging. Pending final results, a large confirmatory trial will be undertaken.