

Role of oral microbiota in the severity of chemotherapy-induced oral mucositis

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At the 96th General Session of the International Association for Dental Research (IADR), held in conjunction with the IADR Pan European Regional (PER) Congress, Kai Soo Tan, National University of Singapore, gave a oral presentation titled "Role of Oral Microbiota in the Severity of Chemotherapy-Induced Oral Mucositis." The IADR/PER General Session & Exhibition is in London, England at the ExCeL London Convention Center from July 25-28, 2018.

Oral mucositis (OM) is a painful and debilitating condition that affects patients receiving chemotherapy and head and neck radiotherapy. OM treatment remains largely symptomatic and has not improved in years. Previous preclinical and observational studies have shown a higher abundance of [microbiota](#) in OM and coincidentally peaked bacterial colonization with increased severity of OM. Tan and co-authors investigated the potential role of oral bacteria in OM pathogenesis and the therapeutic effect and safety of probiotics in OM.

Tan and co-authors found that germ-free mice exhibited significantly less severe weight loss and diarrhea compared to specific pathogen free mice. Oral mucosa tissues of germ-free mice showed reduced inflammation and atrophy compared to specific pathogen free mice. Mice fed with probiotics also showed an improvement in the epithelial thickness compared to [mice](#) that were not given probiotics.

This study shows for the first time that oral microbiota exacerbates chemotherapy-induced OM severity and that administration of probiotics reduces the severity of OM.

Provided by International & American Associations for Dental Research

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