disease definition, and diagnostic criteria can be improved and clarified.

USE OF PRESCRIPTION SIALAGOGUES FOR MANAGEMENT OF XEROSTOMIA IN CHRONIC GRAFT-VS-HOST DISEASE

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Objectives: The objective of this study was to analyze use patterns of prescription sialagogues for management of xerostomia in patients with chronic graft-vs-host disease (cGVHD) after allogeneic hematopoietic cell transplant (allo-HSCT).

Methods: A retrospective chart review was conducted of patients who were diagnosed with cGVHD and prescribed sialogogue therapy from 2005 to 2019. Data collected included patient demographic characteristics, date of transplant, date of oral cGVHD diagnosis, concurrent immunosuppressive medication, sialogogue regimen including start and end dates, worst xerostomia score reported, and patient-reported percentage improvement.

Results: This study included 67 patients with a median age of 64 years (range, 25-78 years) diagnosed with oral cGVHD at a median of 8.2 months after allo-HSCT. Most patients were prescribed pilocarpine (81%) at 5 mg (88.5%) or, less frequently, 7.5 mg (3.8%), 10 mg (5.8%), or 15 mg (1.9%). Cevimeline was prescribed less frequently (19%), always at 30 mg. The median worst xerostomia score was 6.5 (range, 1-10). Pilocarpine dose was increased in 2 patients (4%) with no subsequent change in worse xerostomia score or percentage improvement. Overall median duration of therapy was 7.4 months (range, 1-152). For patients receiving pilocarpine, the median duration on therapy was 7 months (range, 1-152), and for patients on cevimeline, the median duration was 10 months (range, 1-111 months). The overall median patient-reported percentage improvement was 20% (range, 0-100%). Most common side effects were diarrhea (1.6%) and nausea (2.9%); excessive sweating was infrequent (1.4%).

Conclusions: The median duration of sialogogue therapy was 7.4 months, and most patients were prescribed pilocarpine at 5 mg. The median overall reported improvement was 20%, and side effects were infrequent and did not lead to therapy discontinuation. Patients receiving higher dosages of pilocarpine had a higher worst xerostomia score and a lower percentage improvement in symptoms. The prolonged duration of therapy suggests perceived benefits; however, prospective studies are needed.

ASSOCIATION OF *CANDIDA* AND FLUCONAZOLE THERAPY WITH PROINFLAMMATORY CYTOKINES IN ORAL LEUKOPLAKIA: A PILOT STUDY

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Objectives: Chronic inflammation caused by infection may lead to the production of proinflammatory cytokines (PICs) that can cause DNA damage and cell proliferation, thus playing a role in carcinogenesis. *Candida* infection has been reported to be increased in oral leukoplakia (OL) and is associated with an increased rate of malignant transformation into oral squamous cell carcinoma (OSCC). In vitro studies have demonstrated that the interactions between *Candida* and the oral epithelium lead to the release of PICs (interleukin [IL]-6, IL-8. IL-17, tumor necrosis factor [TNF]-α) that have also been found to be upregulated in OSCC and OL. This study aims to determine the correlation between *Candida* infection and PICs and their response to fluconazole therapy in OL.

Methods: Immunocompetent adult patients with OL (30 homogenous leukoplakia [HL], 30 nonhomogenous leukoplakia [NHL]) and 30 age- and sex-matched healthy control subjects (C) with no predisposing factors for oral candidal infection were recruited. Sterile cotton swabs and polyvinyl alcohol ophthalmic sponges were used to take samples from the lesional surface in OL and from the buccal mucosa in C for direct microscopy and culture for *Candida* and to determine levels of PICs (IL-6, IL-8, IL-17, TNF-α) by enzyme-linked immunosorbent assay, respectively. Sampling for PICs was repeated from the same sites in OL after treatment with tablet fluconazole 100 mg (oral rinse for 2 minutes and swallow) once daily for 14 days. Chi-square and Mann-Whitney *U* tests were used to estimate the difference between the groups.

Results: Forty percent of patients with NHL and 30% of patients with HL had positive findings for *Candida albicans*. Levels of IL-6, IL-8, and IL-17 were observed to be significantly higher ($P < .05$) in patients with NHL than in those with HL and in C. Patients with NHL and HL showing the presence of *C. albicans* had significantly ($P < .05$) higher levels of IL-6, IL-8, IL-17, and TNF-α than C and showed reduction in their levels and clinical improvement (decrease in size, thickness, and erythema) after fluconazole therapy.

Conclusions: Candidal infection is common in OL and causes release of PICs. There is a decrease in levels of these PICs and clinical improvement after fluconazole therapy in both NHL and HL. Hence, antifungal therapy in the management of OL can reduce the inflammatory milieu in which carcinogenesis can occur.

IN VIVO ECTOPIC OSTEOGENESIS OF ADIPOSE-DERIVED MESENCHYMAL STEM CELLS/OSTEOBLASTS COMBINED WITH PLLA/HAP NANOSTRUCTURED AEROGEL SCAFFOLDS

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Objectives: Osteoblast deficiency is a key problem in bone tissue engineering, and transplant of mesenchymal stem cells combined with osteoblasts can achieve ideal results. We sought to investigate the in vivo ectopic osteogenesis of adipose-derived mesenchymal stem cells (ADSCs) and osteoblasts (OBs) combined with poly(L-lactic acid) (PLLA)/hydroxyapatite (HAp) nanostructured aerogel scaffolds.

Methods: We tested a new supercritical fluid-assisted technique for the formation of nanostructured aerogel scaffolds. We obtained PLLA aerogel scaffolds and PLLA/HAp aerogel