ORAL HEALTH PROFILE OF PATIENTS UNDERGOING ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION WITH CHRONIC ORAL GRAFT-VERSUS-HOST DISEASE

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Introduction

Oral chronic graft-versus-host disease (cGVHD) is a frequent complication of allogeneic hematopoietic stem cell transplantation (allo-HSCT). Despite good oral hygiene, affected individuals may develop severe dental caries.

We aimed to characterize and profile the oral health of patients pre- and post-allo-HSCT with oral cGVHD.

Methods

The sample consisted of 46 patients who undergone to allo-HSCT between 2010 and 2022 and developed oral cGVHD.

A cohort study with the collection data, including: clinical evaluation of the oral cavity (DMFT index), evaluation of oral cGVHD, unstimulated sialometry test, and oral hygiene classification. Patients were divided into two groups: with and without active cGVHD.

Results

Table 1: DMFT index before and after allo-HSCT

Characteristic	**DMFT pre-HSCT** n = 46[1]	**DMFT post-HSCT** n = 46[1]	***p*-value**[2]
DMFT	0.00 - 0.55 (0.54) - 2.88	0.14 - 0.79 (0.76) - 4.66	0.006

[1]Min - Mean (SD) - Max
[2]Wilcoxon rank sum test

Table 2: Decayed teeth of patients with active and non-active oral cGVHD

Characteristic	**Non-oral cGVHD active** n = 34[1]	**Oral cGVHD active** n = 12[1]	***p*-value**[2]
Decayed (DMFT)	0.00 - 2.24 (2.66) - 10.00	0.00 - 7.25 (5.93) - 24.00	<0.001

[1]Min - Mean (SD) - Max
[2]Wilcoxon rank sum test

Image 1: Correlation between unstimulated sialometry volume and DMFT post allo-HSCT

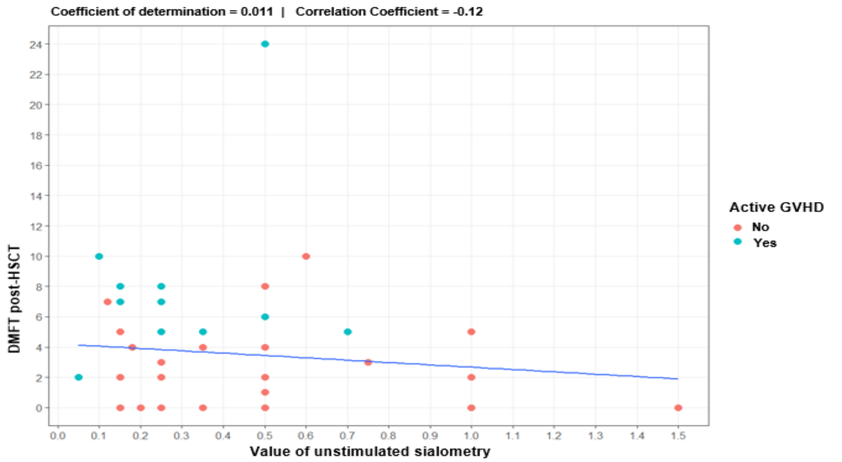
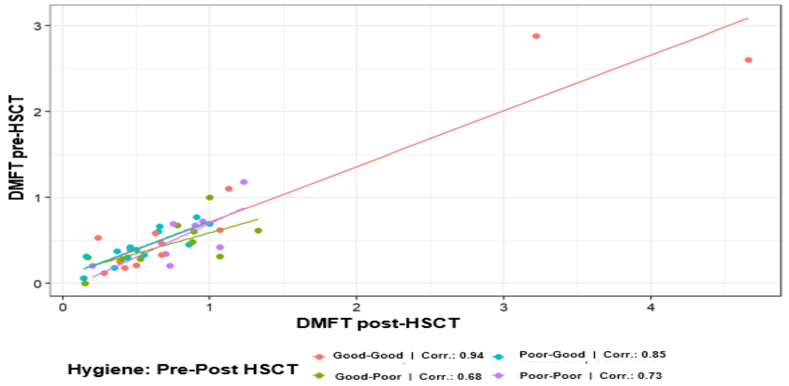


Image 2: Correlation between DMFT pre and post HSCT and Hygiene pre and post allo-HSCT



Conclusions

Patients with cGVHD are prone to develop more dental caries. In this study, hyposalivation and hygiene did not influence the increase in DMFT post-HSCT, and in future investigations we intend to focus on the salivary microbiome of these patients, since it may play a role in the pathogenesis of dental caries and contribute to the understanding of the factors that may affect oral health in patients with cGVHD.