Oral health prior to HSCT may predict the risk of local and systemic intercurrentences during HSCT.

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Introduction: Hematopoietic allogenic stem cell transplantation (allo-HSCT) is related to several systemic complications and oral side effects. The most common in the acute phase of the treatment are: febrile neutropenia; bacteremia, infections, oral and intestinal mucositis. Despite the knowledge relationship between oral health status and other systemic diseases (diabetes, pneumonia and cardiovascular diseases) there is little information about the relationship between oral health status and acute complications in the HSCT. **Objectives:** To evaluate the relationship between oral health before allo-HSCT and complications associated with the acute phase of the treatment. **Methods:** Cross-sectional study was conducted by evaluating medical records of patients submitted to the first allo-HSCT.

Study design:

Results:

Table1: Global Results

Age	25.7 (12-61)
Gender (Male: Female)	23:19
Disease (Benign:Malignant)	23 (59.5%) : 17 (40.5%)
Oral Health Before HSCT	
Oral Hygiene (Satisfactory:Unsatisfactory)	21 (50.0%) : 21 (50.0%)
Periodontal Disease	4 (9.5%)
Oral Foci of Infection	7 (16.7%)
DMFT	7.28 (±27)
Treatment Characteristics	
Type (Allogenic:Haploidentical)	35 (83.3%) : 7 (16.7%)
Conditioning (Myeloablative: Reduced Inten.)	6 (38.1%) : 26(61.9%)
TBI	7 (16.7%)
Endpoints	
Systemic	
Febrile Neutropenia	32 (76.2%)
Positive Hemoculture (more than one)	16 (38.1%)
Opioid Use	13 (30.9%)
Need of Parenteral Nutrition	9 (21.4%)
Acute GVHD	10 (23.8%)
Oral	
Mucositis Incidence	24 (57.1%)
Mucositis (I-II : III-IV)	14 (31.0%) : 11 (26.2%)
Mucositis duration (7 days or less : more than 7 days)	14 (58.3%) : 10 (41.7%)
Oral Infection	6 (14.3%)

Endpoints (Only Results With Significance):

Febrile Neutropenia

Opioid Use and Parenteral Nutrition

	Mucositis (%)	Mucositis III-IV (%)	Mucositis I-II + no Mucositis (%)	p
Need of Opioid Use	100	84.6	15.4	0.001
Need of Parenteral Nutrition	100	100	0	0.001

Fisher's Exact Test

.Oral Mucositis

Disease Vs. Severity and Duration

Conditioning Vs. Severity and Duration

.Oral Infection

Oral Hygiene and Oral Foci

Oral Infection Vs. DMFT Index

Conclusions:

- 1.Unsatisfactory Oral Hygiene increased 5.84 times the risk of febrile neutropenia;
- 2.Previus Oral Foci of Infection and Unsatisfactory Oral Hygiene increased the risk of Oral Infection during neutropenia in 6.0 and 8.0 times respectively;
- 3.Patients with Oral Infection during neutropenia presented higher DMFT Index.

-This Study highlights the importance of oral health before allo-HSCT in acute complications related to the treatment.

-There is a need for future studies with a larger number of patients to evaluate the impact of dental care before transplantation with acute complications.