

Introduction

Leukemia is the most common childhood cancer, and cancer-directed therapies are frequently associated with significant oral complications, including mucositis, infections, and increased dental caries, which may adversely affect treatment outcomes and patient quality of life. Although early dental evaluation is recommended, the integration of oral health care into pediatric oncology remains inconsistent. This study evaluates the extent to which oral health assessments, dental referrals, and establishment of a dental home occur for pediatric oncology patients, with the goal of identifying gaps in care and promoting comprehensive dental involvement before, during, and after cancer treatment.

Purpose

This study aims to evaluate the timeliness of dental evaluations after hospital admission and the adequacy of one-year oral health follow-up in pediatric oncology patients, underscoring the importance of integrating dental care into comprehensive oncology management.

Methods

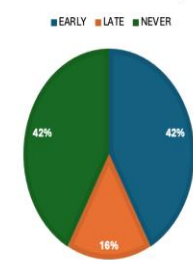
A retrospective chart review was conducted on pediatric patients (ages 2–12) diagnosed with leukemia and admitted to Cohen Children's Medical Center between January 2022 and January 2025. Medical records were reviewed to assess:

- Timing of dental evaluation after hospital admission
 - Early: ≤ 4 weeks
 - Late: > 4 weeks
- None: no evaluation documented
- Oral health status at the time of dental examination
- Documentation of oral health evaluation and dental follow-up at the 1-year oncology visit

This was a descriptive study, with outcomes reported as means, frequencies, and proportions.

Results

TYPES OF DENTAL EXAMS (N=62)



62 patients included (mean age: 7 ± 3 years; 50% male)

Dental evaluation after admission:

- 42% early exam (≤ 4 weeks)
- 16% late exam (> 4 weeks)

42% no dental exam

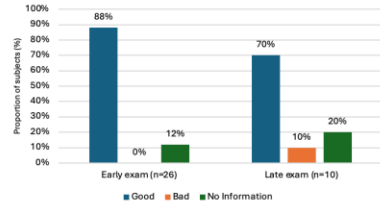
Oral health status:

- Early exams: 88% good, 0% poor, 12% no documentation
- Late exams: 70% good, 10% poor, 20% no documentation

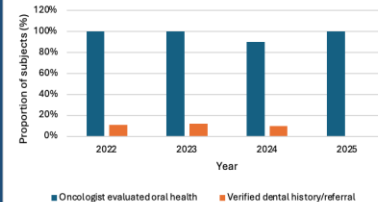
1-year follow-up (n=56):

- 96% had oral health assessed by oncology
- Only 11% had documented dental history or referral

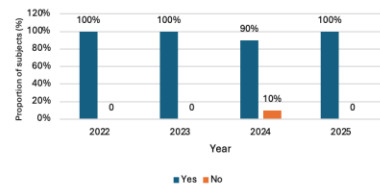
Oral Health Status at Dental Exam



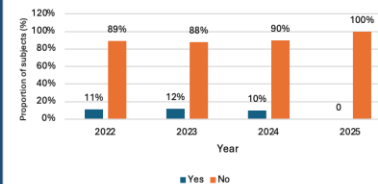
Oncology One Year Follow Up (n=56)



Oncologist evaluating oral health at 1-year follow-up (n=56)



Dental history/referral at 1-year follow-up (n=56)



Discussion

- Early dental evaluations were more likely to document good oral health status at the time of assessment, supporting the value of prompt dental involvement.
- Despite this, early dental evaluation after admission was inconsistent, with nearly half of patients receiving no documented dental examination.
- While oral health is frequently referenced in oncology assessments, this documentation rarely resulted in formal dental referrals or establishment of ongoing dental care.
- Reliance on generic documentation templates may overestimate true oral health evaluation, limiting meaningful assessment and follow-through.
- These findings highlight a critical disconnect between recognition of oral health concerns and actionable dental care within pediatric oncology.
- The results underscore the need for standardized oral health protocols and improved interdisciplinary coordination between oncology and dental services.

Conclusion

- This study identified a system-level gap in dental care integration, with templated documentation often replacing meaningful oral health assessment.
- Interdisciplinary collaboration with oncology led to implementation of mandatory EPIC hard stops, requiring documentation of prior dental care before chart completion.
- A dedicated pediatric dental residency rotation was established to provide weekly inpatient assessments and ensure continuity of dental follow-up.
- Anticipatory guidance materials were developed to educate oncology teams and families on oral health expectations before and during treatment.
- These targeted interventions move beyond documentation toward sustainable, integrated dental care within pediatric oncology.

References:

