

Referral Status of Patients Who Develop Caries Following Oral Rehabilitation

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INTRODUCTION

Early Childhood Caries (ECC) and Severe Early Childhood Caries (S-ECC) are conditions which are highly correlated with future caries¹. Complete oral rehabilitation under general anesthesia (GA) is an important treatment modality supported by the American Academy of Pediatric Dentistry (AAPD) and is often used to treat children with ECC or S-ECC. It is a valued option used to treat patients who are unable to cooperate, are extremely anxious or fearful, require significant surgical procedures, and can benefit from protecting their developing psyche^{2,3}. This treatment modality is sometimes not widely available to some patient populations, however, especially in rural or Health Professions Shortage Areas (HPSAs)¹. This results in some children being referred to dental clinics apart from their dental home where GA is available. Research regarding referral status of patients treated under GA with future caries experience is lacking. Understanding the factors that contribute to future caries experience is important in order to improve the future oral health of high caries risk children.

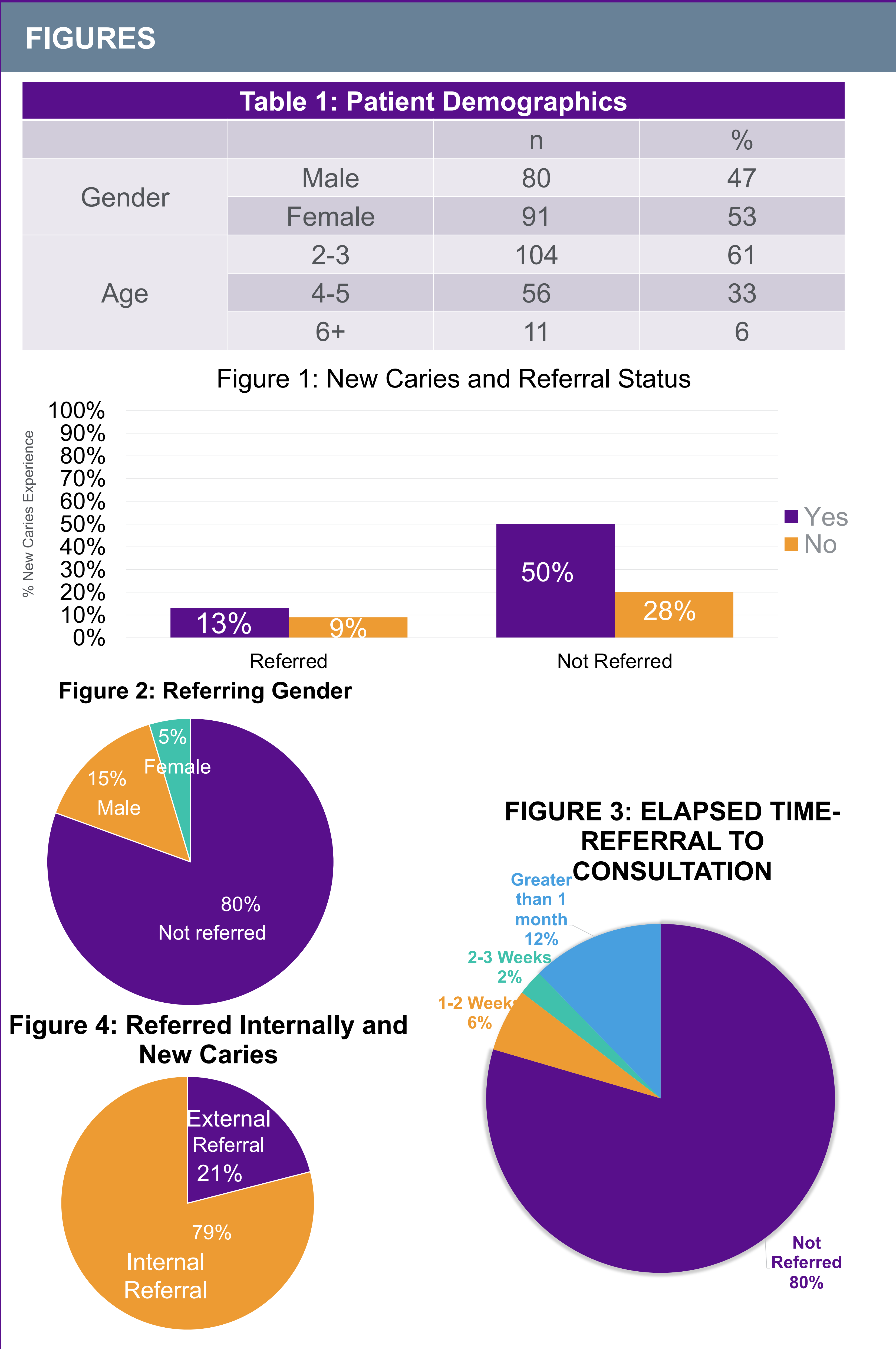
PURPOSE

The purpose of this study is to determine whether the referral status of a patient who undergoes complete oral rehabilitation under general anesthesia is related to future caries experience.

METHOD

A retrospective chart review was performed on patients who had initial treatment of ECC or S-ECC via complete oral rehabilitation under general anesthesia. Treatment groups included patients whose dental home was identified as Jordan Valley Community Health Center (JVCHC) compared to those whose dental home was an outside entity. Inclusion criteria included patients age 1-12 years of age whose initial treatment under GA at JVCHC and which included one or more posterior primary molars left untreated.

Data was de-identified and entered into REDCap (Research Electronic Data Capture) tools hosted by NYU-Langone Hospitals. Data was analyzed by statisticians employed by NYU-Langone Hospitals for statistical significance.



RESULTS

Groups defined by demographic variables were approximately equal. A majority of patients who returned requiring treatment had dental homes within the health center at which treatment was completed (n=86, 50%). Of the patients referred from outside the health center, most were either seen for consultation within one to two weeks of their referral (n=10, 5%) or more than a month from referral (n=21, 12%). Statistical analysis utilizing Fisher’s Exact test was completed and no variables were found to be statistically significant (P>0.05).

CONCLUSIONS

Most patients in this study who presented with future caries experience considered JVCHC their dental home. This finding may indicate that patients who require GA for treatment return to their dental home for future treatment needs. The gender of referring dentists did not correlate with future caries experience. This may show that gender is not a confounding variable associated with referral for treatment under GA and that referring dentists are relatively capable of completing future treatment on children with past GA histories irrespective of gender. Of the referred patients, most completed their consultation for treatment in <2 weeks from referral or >1 month from referral. This points to the importance of availability and flexibility of the providers who accept referrals from outside sources. Referred patients may be in pain or have waited for treatment for some time due to distance barriers, so having open availability and flexible accommodations to help overcome patient barriers is important. These flexible arrangements may include financial assistance, transportation, or availability of telehealth services. In addition, patients who experienced their consultation appointment more than 1 month following referral (n=21, 12%) are likely to have had communication difficulties. In this patient population, that may include telephone disconnection, aberrant work hours, or other difficulties in reaching patient families.

Future research should aim to investigate these individual-level factors in determining ways

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