BETTER CHILD HEALTH WITH BETTER ORAL CARE.

SKI FOR KIDS

IMPACT REPORT 2018

SickKids VS Limits

SUPPORTING EXCELLENCE IN ORAL CARE

Thank you for Ski for Kids' support of excellence in research, training, and clinical care at the SickKids Department of Dentistry. Our busy dental clinic handles over 16,000 patient visits annually. Up to 95% of our patients present with co-morbidities that require oral care, including craniofacial or neurosensory conditions, heart disease, or cancer.

IN A YEAR AT SICKKIDS

16,000+ CLINICAL VISITS
1,200 DENTAL SURGERIES IN THE OR
400+ AFTER-HOURS EMERGENCIES

Over the last year, Ski for Kids has supported three research projects, each investigating how oral care can improve the health and well-being of children with different co-morbidities.

1. AMELIORATING SLEEP APNEA IN CHILDREN WITH DOWN SYNDROME AND OBESITY

Children with Down syndrome are at risk of sleep apnea for a combination of reasons: their neurological condition, craniofacial structure, and a predisposition to obesity. Structurally, they often have small sinuses, a relatively large lower jaw, and a proportionally large tongue. Although these structural features may contribute to sleep apnea, we don't know precisely how or whether we could address some of these issues orthodontically.

Funding from Ski for Kids has supported a SickKids study to assess the craniofacial features of children with Down syndrome and whether orthodontic interventions, for example expanding the nasal airway, could lessen the severity of sleep apnea. The study, with a cohort of 30 children, is being led by Dr. Corey Ng, one of our graduate students, in collaboration with Drs. Bryan Tompson and Sunjay Suri. With your support, the study's data-collection is complete, and the analysis is underway.

2. ASSESSING SPEECH CHANGE IN ALVEOLAR BONE GRAFT TREATMENT

To prepare children with cleft lip and palate for an alveolar bone graft, we fit them with an orthodontic expander that they wear as a retainer for three to six months prior to surgery. The expander is a bulky dental appliance that interferes with speech. Our patients are usually between seven and 10 years old when they have the bone graft—a time when kids are developing socially and impediments to speech can be a challenge to self-expression and self-esteem.

Our clinical practice tells us that our patients' speech is affected by the expander, but no research has been done to investigate the effects. With your support, Dr. Kyle Stevens, Director of Orthodontics, is leading a study with speech-pathology colleagues to assess our patients' speech in relation to this orthodontic procedure. The study aims to recruit 35 patients, with 26 enrolled so far. We're following each patient for 12 months and, when they come in for their orthodontic appointments, recording their reading of stereotypic statements. By measuring our patients' speech before, during, and after the expander phase, we'll be able to develop guidelines about speech pathology or other supports that would help our patients while they wear the retainer. This study will also lay the groundwork for future research to assess the effects of our clinical care on our patients.

3. EVALUATING THE EFFECTS OF UPPER JAW GROWTH OF EARLY VERSUS LATER BONE GRAFTS IN CHILDREN WITH UNILATERAL CLEFTS

Drs. Stevens, Suri, and Yona Vandersluis, another of our talented graduate students, are conducting a retrospective study of cleft lip and palate patients. Funding from Ski for Kids has supported the statistical analysis for this study.

Thank you for helping to advance research that is deepening our knowledge and clinical practice, enabling us to improve our patients' health. I look forward to keeping you updated on the progress we're making with your support.

Sincerely yours,

Dr. Michael Casas
Dentist-in-Chief