

Special Needs Patient

Dental home for Bradley

Patient Information

- Bradley
- 14 years old
- DOB 5/28/98
- Height:63"
- Weight:116 lbs
- BMI: 20.5 (63 percentile - healthy range)
- Male
- Caucasian
- ASA II

Health History

- Down Syndrome
- Asthma - Albuterol Nebulizer
- Hx of mild hammocking of the mitral valve, cleared by cardiologist in 2008 for normal cardiac function.
- Allergies: Latex, Codeine, Robitussin DM.
- Augmentin use leads to opportunistic fungal infections
- Vaccines up to date
- No tobacco products, alcohol, or illicit drugs
- Bradley was born Cesarean w/no complications.
- Moderate developmental delay
- No major surgeries.

Social History

- Mother and father present in the home
- Bradley is the first of two boys.
- Mother was in her late 30s when bradley was born.
- No tobacco use in the home
- English is the primary language
- The Dornes family have lived in Bertin throughout Bradley's life.
- Bradley attends Cedar Chapel Special School
- Likes: computers, PS2: Quad runner, and John Cena

Dental History

- Patient referred by Worcester Dental and presented to TLC on 3/15/2013
- Previously only able to perform visual exam.
- Previous dental work included prophyl, fl- application and #30 MO composite.
- Mother states that brushing is always a battle in which she needs to hold him down to accomplish.
- Patient lives in optimally fluoridated community, and drinks both bottled and tap water, but mostly juices.



Comprehensive Exam

Patient's Name: Bradley
 Age: 14
 Gender: Male
 Race: Caucasian
 Chief Complaint: Needs an exam, but unable @ previous dental office
 Medical Hx: Down Syndrome, Asthma, Heart Murmur, seasonal allergies
 Meds: Pulmicort, Albuterol, Singulair
 Allergies: Latex, Robitussin DM, Codeine,
 ASA: II
 Wong-Baker Pain Assessment: 0/10
 Dental History: previous dental care at Worcester Dental, but they were unable to obtain radiographs, so he was referred to TLC for sedation.

DISCUSSION: Bradley Dornes has Down Syndrome, w/ borderline cooperation. spoke w/ mom about the caries present in Bradley's mouth, and set a plan for restoring his teeth. We will attempt some of the work intra-operatively to assess Bradley's cooperation, then if necessary we will take him to the OR for any care that needs to be taken care of.

Soft Tissue Exam

- No Lymphadenopathy
- No Head/neck Swellings
- Poor Oral Hygiene
- Moderate Gingivitis/plaque in all sextants
- minimal calculus in mandibular anterior
- Mallampati IV
- Facial form typical of Downs syndrome
 - Flattened frontal facial aspect
 - Micrognathic mandible - relative-macroglossia
 - Small ears

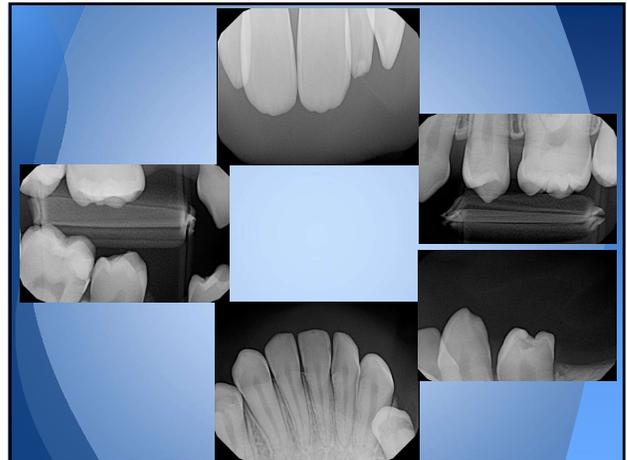
Medical Clearance

Electrocardiogram shows normal sinus rhythm, nonspecific T-wave change, and corrected QT interval 0.412.

In summary, Bradley has Down syndrome and demonstrates a normal cardiac evaluation today. Accordingly, he requires no restrictions from a cardiac standpoint. He may proceed with all of the planned procedures with no special cardiac restriction. He does not need SBE prophylaxis for any of the procedures. He should return to you for ongoing healthcare supervision.

Thank you very much for allowing me to participate in your patient's care. If you have any questions, please do not hesitate to call (1-800-700-USA3).

No SBE necessary



Dornes, Bradley



Trisomy 21 Syndrome

Increased frequency of:

- Cardiac Defects (40% of trisomy 21 patients)
- Leukemia (10 -20x greater incidence)
- upper respiratory infections
- Rapid destructive periodontal disease
 - causes may include tooth morphology, bruxism, malocclusion poor OH, poor circulation and decreased humoral response.

Trisomy 21 Syndrome

Skeletal findings include:

- underdeveloped midface
 - open bite, mouth breathing, prognathic occlusion, psuedo-macroglossia
- angular cheilitis
- Delayed eruption
- missing/malformed teeth
 - oligodontia, microdontia, small roots, crowding

Down Syndrome & Periodontitis

- the prevalence and severity of periodontal disease in children with [Down Syndrome] are much higher than the norm. A high prevalence of necrotizing ulcerative gingivitis was also observed.
- individuals with [Down Syndrome] have a higher prevalence of periodontal disease than otherwise normal, age matched control groups and other mentally disabled patients of similar age.
- the reports of exaggerated immunoinflammatory responses of the tissues in DS patients cannot be explained by poor oral hygiene alone and may be the result of impaired cell mediated and humoral immunities and deficient phagocytic systems

Down Syndrome & Caries

Dental Caries susceptibility is usually low in those with [Down Syndrome].

- study by Brown and Cunningham
 - 44% caries free
- Study by Shapira and Stabholz
 - Successful Preventive oral health program reduced caries rate and increased periodontal health.

Behavior Guidance

- Behavior guidance of the patient with SHCN can be challenging.
- Because of dental anxiety or a lack of understanding of dental care, children with disabilities may exhibit resistant behaviors. These behaviors can interfere with the safe delivery of dental treatment. With the parent/caregiver's assistance, most patients with physical and mental disabilities can be managed in the dental office.
- Protective stabilization can be helpful in patients for whom traditional behavior guidance techniques are not adequate.
- When protective stabilization is not feasible or effective, sedation or general anesthesia is the behavioral guidance armamentarium of choice.
- When in-office sedation/general anesthesia is not feasible or effective, an out-patient surgical care facility might be necessary.

Patient communication

- When treating patients with SHCN, similar to any other child, developmentally- appropriate communication is critical. Often, information provided by a parent or caregiver prior to the patient's visit can assist greatly in preparation for the appointment.
- An attempt should be made to communicate directly with the patient during the provision of dental care.
- A patient who does not communicate verbally may communicate in a variety of non-traditional ways.
- At times, a parent, family member, or caretaker may need to be present to facilitate communication and/or provide information that the patient cannot.
- If attempts to communicate with a patient with SHCN/parent are unsuccessful because of a disability such as impaired hearing, the dentist must work with those individuals to establish an effective means of communications.

Treatment particulars

- Gag reflex
 - Patients with [down syndrome] often have a marked gag reflex
 - any dental examination that passes the limit of the premolar region can cause a gag reflex that may be accompanied by GER.
 - The gag reflex may often be reduced if the discomfort is quickly recognized, if the patient-dentist relationship is good, and by the use of facial and intraoral massage.

Transitioning

- When patients with SHCN reach adulthood, their oral health care needs may extend beyond the scope of the pediatric dentist's training.
- It is important to educate and prepare the patient and parent on the value of transitioning to a dentist who is knowledgeable in adult oral health needs.
- At a time agreed upon by the patient, parent, and pediatric dentist, the patient should be transitioned to a dentist knowledgeable and comfortable with managing that patient's specific health care needs.
- In cases where this is not possible or desired, the dental home can remain with the pediatric dentist and appropriate referrals for specialized dental care should be recommended when needed.