Dental Issues in Turner’s Syndrome

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Famous People With Turner Syndrome

Linda Hunt, actress

Melissa Marlowe, gymnast
Dental Characteristics in TS

- Short cranial base
- High palatal vault
- Retrognathic mandible (and maxilla)
- Distal molar relation
- Large overjet
- Wider mandible
- Increased frequency of bilateral crossbite with anterior open bite
Palatal Shape

Normal palate

High palatal vault
Profile and Overjet

Overjet 8mm
Normal Overjet

Retrognathic Profile
Straight Profile

Twin Block™ 7 Months
Maxilla/Mandible Relationship

- Healthy females
- TS
Smaller crown width in permanent teeth

Reduced crown height

Most likely due to thinner enamel. Dentin usually not affected

Altered cusp shapes

Shorter roots

Atypical root/canal patterns
Disparity in Root Length
Enamel Defects

- Macroscopic enamel defects
- Increased enamel hypoplasias and opacities
The small and retrognathic mandible may contribute to malocclusion and other dental abnormalities.

Correction of the characteristic Class II malocclusion and chin deficiency of TS patients cannot be expected from GH treatment, even if it begins very early.

Orthognathic surgery may be necessary to correct malocclusions.
Orthodontic Considerations

- It is recommended that all girls with TS see a pediatric dental specialist by the age of 2 yr and an orthodontist no later than age 7 yr
- Girls with TS are also at greater risk for root resorption, which can lead to tooth loss, especially during orthodontic treatment
- Osteoporosis may complicate orthodontic treatment
Other Dental Considerations

- Antibiotic prophylaxis due to any cardiac issues
- Fluoride regimen
- Adaptive hygiene techniques for dexterity issues
Early diagnosis of oral anomalies and timely treatment of dental problems by a general dentist and an orthodontist is essential.

Early steps to good oral health in your child:
- Clean your child’s mouth twice a day even if he/she does not have teeth yet. Wipe his/her gums with gauze. Anything that touches someone else’s mouth should not be allowed to touch his/her mouth.
- Once the first tooth appears, use a soft-bristled toothbrush and water to brush your child’s teeth.
Oral Hygiene

- Children should have their first dental visit around the time of their first tooth eruption and no later than age 1
- There should be 20 teeth in your child’s mouth by age 3
- Never put your child to sleep with a bottle containing anything but water
- Routine exams should occur every six months or as determined by your child’s dentist
- Once your child learns not to swallow toothpaste, brush his/her teeth with a rice-sized speck of fluoride toothpaste
Cavity Formation

How Do Cavities Form?

DEMINERALIZATION

Tooth enamel is made up of minerals. When your teeth have been in contact with strong acids, demineralization (the loss of minerals from tooth enamel) occurs.

- Bacteria
  - Bacteria are always present in the mouth. Acids are produced by these bacteria when you eat sugar and other carbohydrates.

- Carbohydrates
  - Acids cause the minerals in your teeth to dissolve, weakening your enamel.

- Acids
  - Weakened enamel makes your teeth vulnerable to cavities, which is why demineralization must be treated early.

Acid results from many types of foods & beverages you may consume regularly.
Proper Oral Hygiene

1. Wrap 18" of floss around middle fingers of each hand. Pinch floss between thumbs and index fingers, leaving 1" - 2" length in between. Use thumbs to direct floss between upper teeth.

2. Keep a 1" - 2" length of floss taut between fingers. Use index fingers to guide floss between contacts of the lower teeth.

3. Gently guide floss between the teeth by using a zig-zag motion. DO NOT SNAP FLOSS BETWEEN YOUR TEETH. Contour floss around the side of the tooth.

4. Slide floss up and down against the tooth surface and under the gumline. Floss each tooth thoroughly with a clean section of floss.
I GIVE IT SIX MONTHS...

Is it dis one?

oh, ya - dat's gotta com owt