

PATIENT: Bruin Bear
DATE OF BIRTH: 2-2-2006
EXAM DATE: 7-1-2025
REFERRED BY: Dr. UCLA

Clinical Indications

Orthodontic Evaluation: initial malocclusion and airway evaluation
Patient is diagnosed with Goldenhar syndrome

Radiographic Examination

CBCT, both jaws with cranium

Image Quality

Optimal for diagnosis

Radiographic findings:**Craniofacial Assessment:**

- Pronounced craniofacial asymmetry
- Retrognathia with aplasia of the left posterior mandible (aplasia of the left body mandible, ramus, coronoid process, and condylar head/neck).
- Hypoplasia of the left zygomatic bone with aplasia of the left zygomatic arch and glenoid fossa.
- Hypoplasia of the left portion of the hyoid bone.
- Hyperplastic right coronoid process. The right TMJ demonstrates normal osseous architecture.
- Right brodie crossbite and left crossbite
- Chin and midline shift to left with occlusal cant.

Ear Anomalies:

- Atresia of the left external auditory canal. Aplasia of the left middle ear ossicles. Left side anotia.
- Opacification is noted in the right middle ear. Near complete opacification of the left mastoid air cells.

Dentition:

- The patient demonstrates mixed dentition with a delayed eruption/exfoliation pattern given the patient's age.
- At the lower left, M-K are noted as well as teeth nos. 20-23. Two hypoplastic molars are noted; these may represent teeth nos. 18 and 19.
- The lamina dura and PDL spaces of the teeth are within normal limits.

Cervical Spine:

- Hypoplasia of the odontoid process of C1.
- C1-C3 appear partially fused.
- Lateral positioning/inclination of the cervical vertebrae relative to the skull base.

Airway:

- Asymmetric and narrow oropharyngeal airway.

Nasal Cavity and Paranasal Sinuses:

- Rightward deviated nasal septum.
- Hypoplasia of the left maxillary sinus.
- The paranasal sinuses and nasal cavity are patent and well-aerated

Impression:

1. Craniofacial and skeletal findings, including aplasia of the left body of the mandible, ramus, coronoid process and condylar head/neck. The described findings are consistent with the patient's diagnosis of Goldenhar syndrome.
2. Asymmetric and narrow oropharyngeal airway. Clinical correlation with patient symptomatology obstructive sleep apnea and/or snoring is recommended.
3. No radiographic evidence of apical or osseous pathoses involving the teeth.

**The oropharyngeal airway is measured from the level of the hard palate to the vallecula. Assessment of airway dimensions is based on published methods. In general, airway constriction has been associated with obstructive sleep apnea. While there are no established norms, in our analyses, we categorize an airway as "narrow" when the minimum cross-sectional area is less than 90mm² and as "severely narrow" when the minimum cross-sectional area is less than 50 mm².*

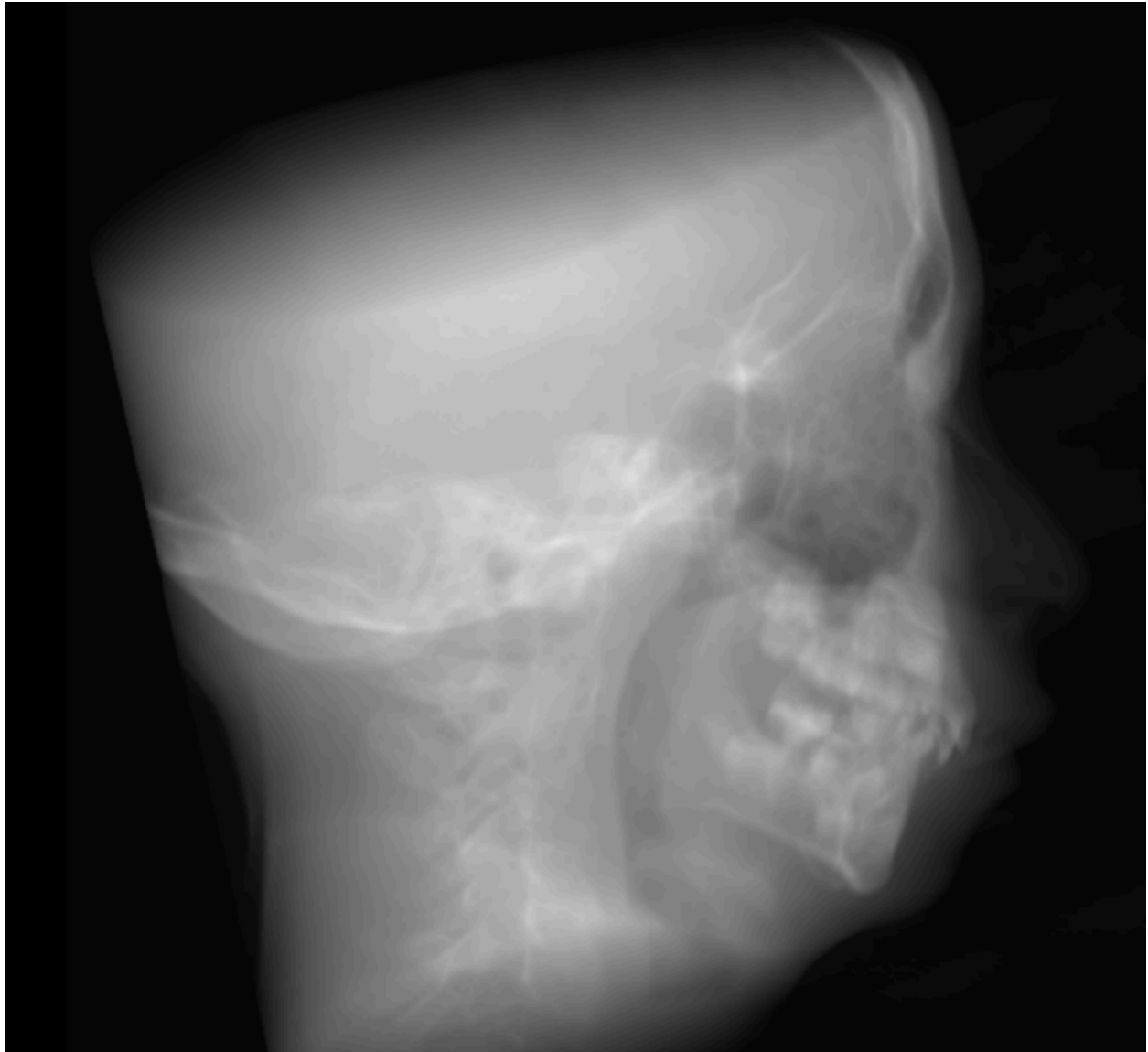
Electronically signed by Dr. Ava Zaboli on 8-30-2025

----- Images Are Provided Below -----

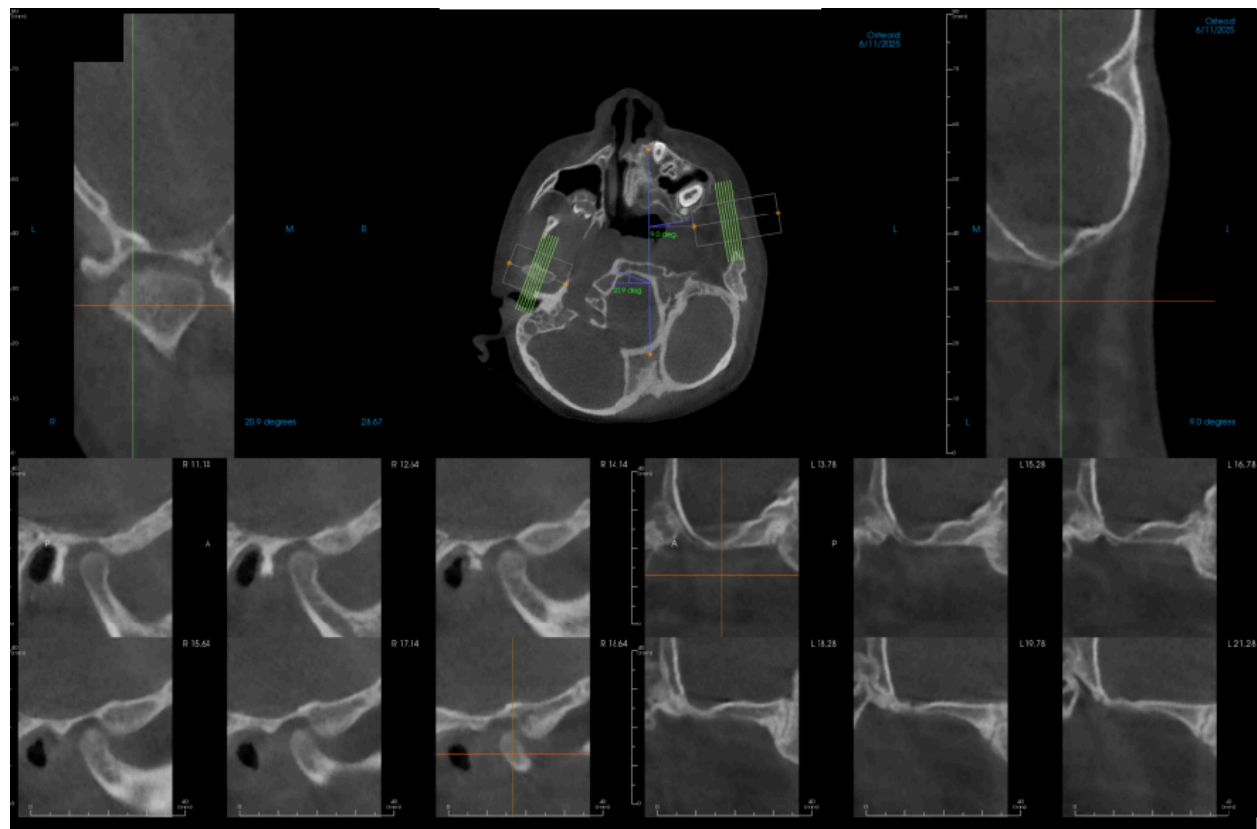
Panoramic Reconstruction



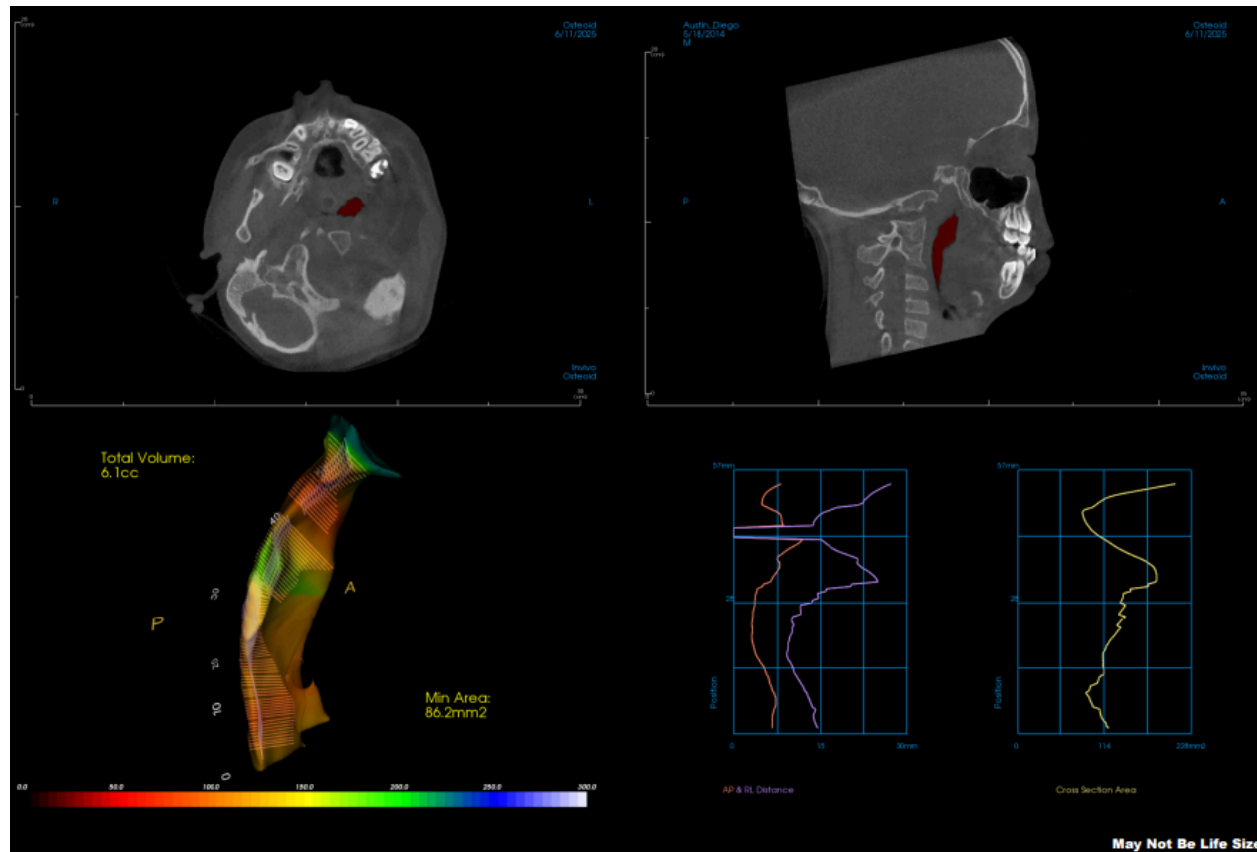
Lateral Cephalometric



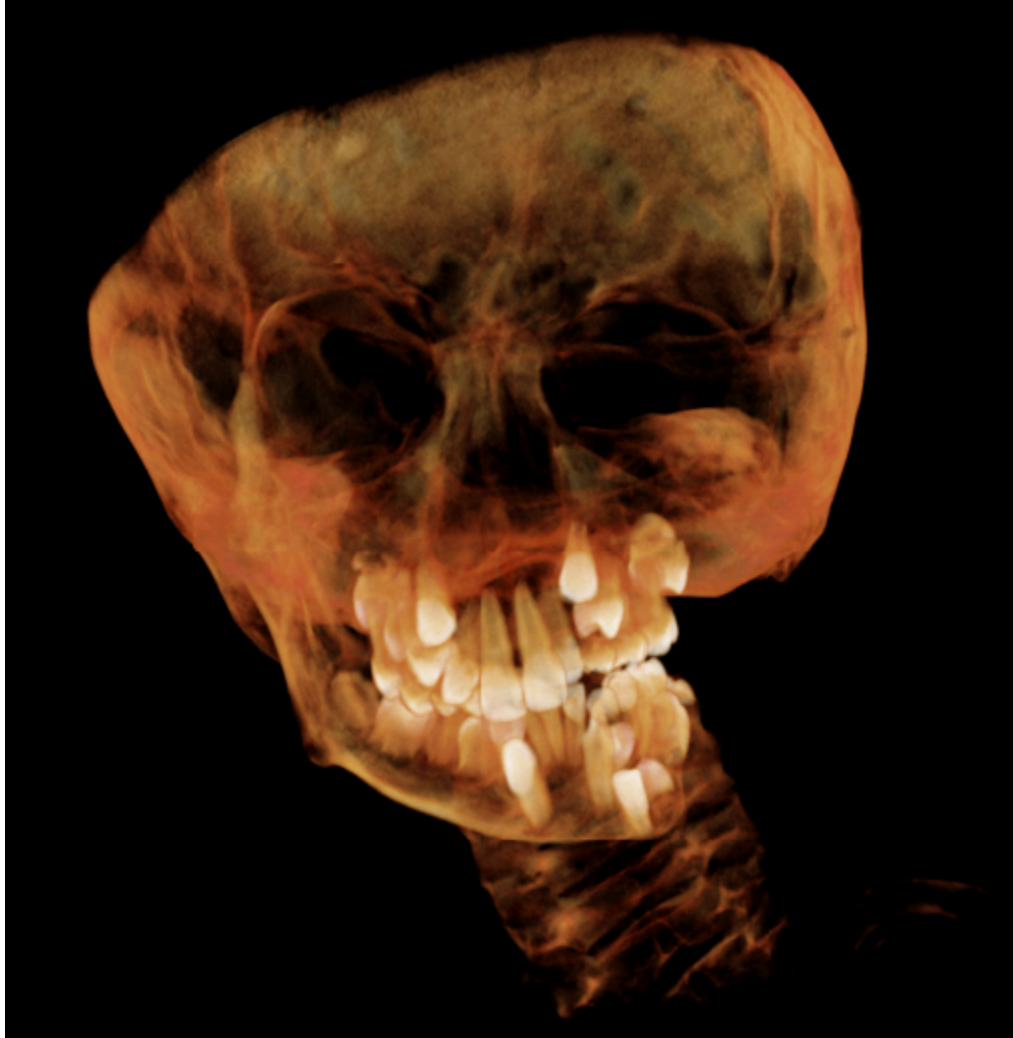
TMJ lateral sections



Airway



Volume Render - frontal view



Volume Render - lateral view

