

10/4/2025

Daniel Buchbinder, DMD, MD Chief,
*Division of Maxillofacial Surgery
Department of Otolaryngology, Head
and Neck Surgery*

T: 212-844-8775

F 212-844-6976

daniel.buchbinder@mountsinai.org

Dr. Zubad Newaz Weiler, Jake TMJ Sleep Airway Orthodontics DOB: 7/28/1998 251 E
33rd St 4th Floor
New York, NY 10016

Dear Dr. Zubad Newaz:

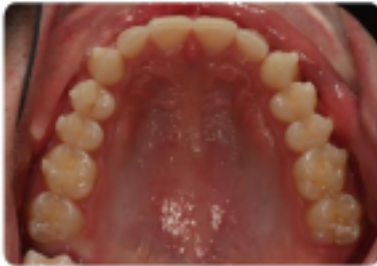
We had the pleasure of meeting Mr. Weiler for an orthognathic evaluation. As you know, Mr. Weiler is a 27-year-old male with past medical history significant for obstructive sleep apnea status post lingual tonsillectomy and epiglottopexy on 6/5/25, who presents with persistent symptoms of severe daytime fatigue despite both CPAP and oral appliance therapy. A polysomnogram (12/11/24) confirmed moderate residual obstructive sleep apnea with oral appliance with an AHI 4% score of 4.5 and AHI 3A score of 29.6. Drug-induced sleep endoscopy (4/10/25) demonstrated near-complete anteroposterior epiglottic collapse when supine, resolving completely with head turn or oral appliance use, and no collapse at the base of tongue, palate, or pharynx. The patient has previously undergone orthodontic treatment with braces from age 7 to 11 with Dr. Maria Pez.

Comprehensive physical, skeletal, and dental analyses were performed at our office.



Profile evaluation reveals a concave facial profile. His nasal projection is straight and adequate. His nasolabial angle is 70°. At rest, there is 0 mm of lip incompetence with 0 mm of maxillary incisor show. On smile, 4 mm of his total 9 mm maxillary central incisor is displayed with no gingival display. Relative to the midsagittal facial plane, the nasal tip and Cupid's bow appear 1 mm to the right. The maxillary dental midline appears 2 mm to the right. The mandibular dental midline appears 1 mm to the right. The pogonion is coincident with the midsagittal plane. There does not appear to be a maxillary cant.

Jake Weiler, 7/28/1998

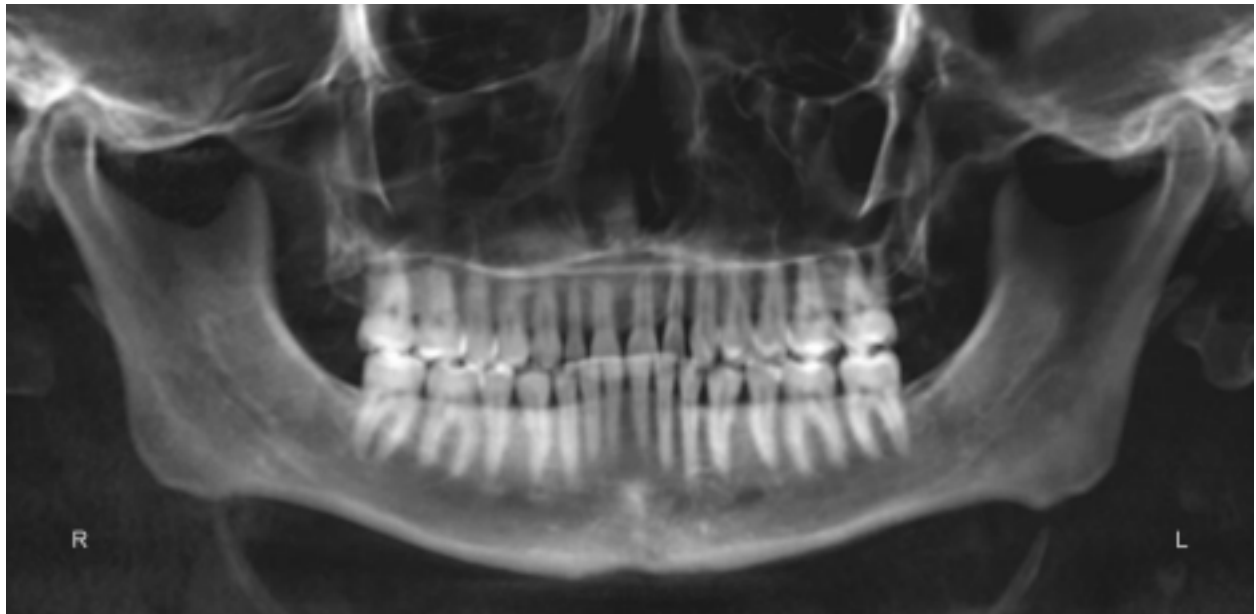


Jake Weiler
DOB: 7/28/1998
Initial: 9/23/2025

Daniel Buchbinder, DMD, MD
10 Union Square East, Suite 5B
New York, NY 10003



Dental analysis demonstrates overall good oral hygiene. There is 2 mm overjet and 4 mm overbite. There is a class I canine and molar relationship bilaterally. The maxillary and mandibular arch forms are U-shaped. There appears to be 1 mm of spacing in the maxillary arch between teeth #10 and #11. There does not appear to be any crowding or spacing in the mandibular arch.



Panoramic radiograph reveals no evidence of active dental decay, periodontal bone loss, or sinus disease. Teeth #1, 16, 17, and 32 are absent. The mandibular condyles are seated into the glenoid fossa bilaterally.

Jake Weiler, 7/28/1998



Cephalometric analysis was performed.

Steiner's analysis demonstrates a **retruded maxilla** (SNA 77.4°) and a **retruded mandible** (SNB 76.0°). The occlusal plane relative to S-N is decreased (10.0°). The interincisal angle is markedly increased (U1-L1 156.3°). Relative to SN, the **maxillary central incisor is retroclined** (U1-SN 94.8°). The mandibular lower incisors are approximately normally inclined (L1-MP 91.6°). **His Wits Appraisal is +3.3 mm, indicating a skeletal Class II maxillomandibular relationship.**

COGS analysis reveals a **decreased facial convexity angle** (N-A-Pg -7.3°). The **mandibular apical base appears to be retrusive** (N-B -10.0 mm). The **lower facial height is decreased** (ANS-Me 56.0 mm). The **vertical maxillary height is severely decreased** (U1-NF 22.7 mm, U6-NF 18.5 mm). The mandibular ramus length is within normal limits (Ar-Go 54.2 mm) and the **mandibular body length is decreased** (Go-Pg 74.9 mm). A divergent gonial angle is noted (Ar-Go-Gn 127.2°). The intrinsic chin projection is within normal limits (B-Pg 9.2 mm). The occlusal plane angle is within normal limits (OP-HP 2.9°). The **upper central incisor angle relative to the nasal floor is retroclined** (100.3°).

Down's analysis demonstrates a normal facial angle (FH-NPo 88.3°), with **decreased facial convexity** (NA-APo -7.3°). The Y-axis is decreased (51.6°), indicating a horizontal pattern of growth. The **occlusal plane relative to Frankfort Horizontal is decreased/flat** (OP-FH 2.5°).

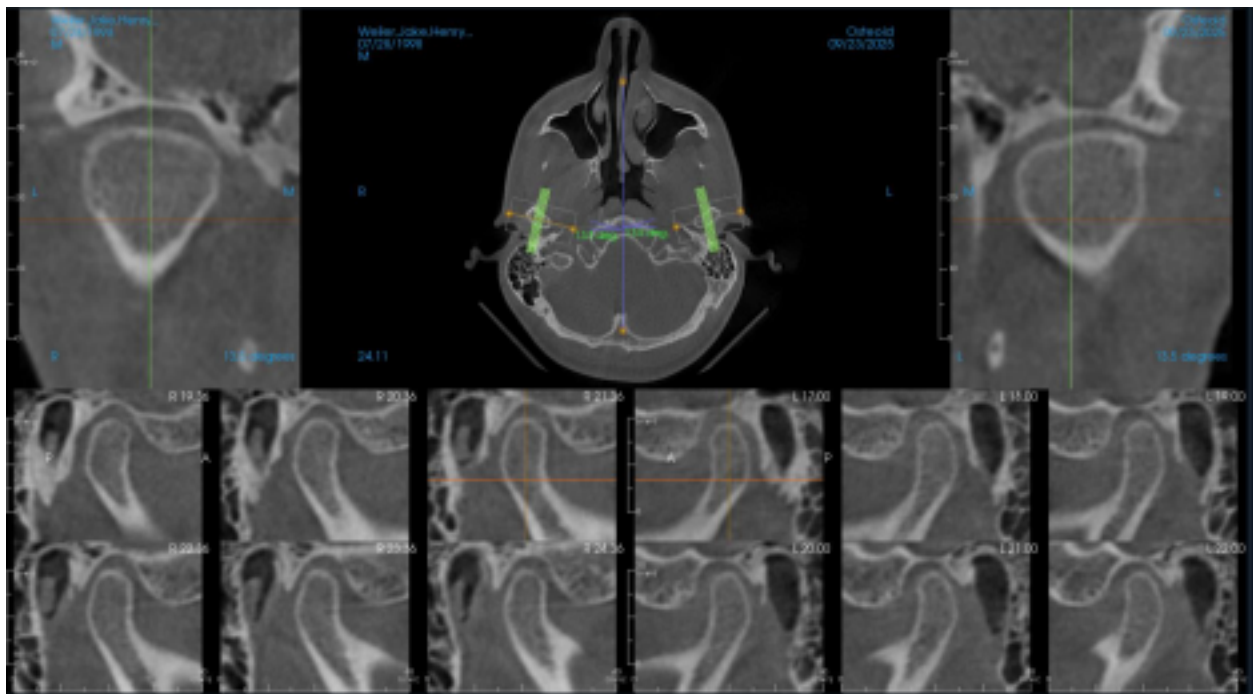
The lower incisor relative to the mandibular plane is within normal limits (L1-MP 91.6°).

Jake Weiler, 7/28/1998

We performed digital impressions to determine if Mr. Weiler currently has a transverse discrepancy in an articulated surgical occlusion.

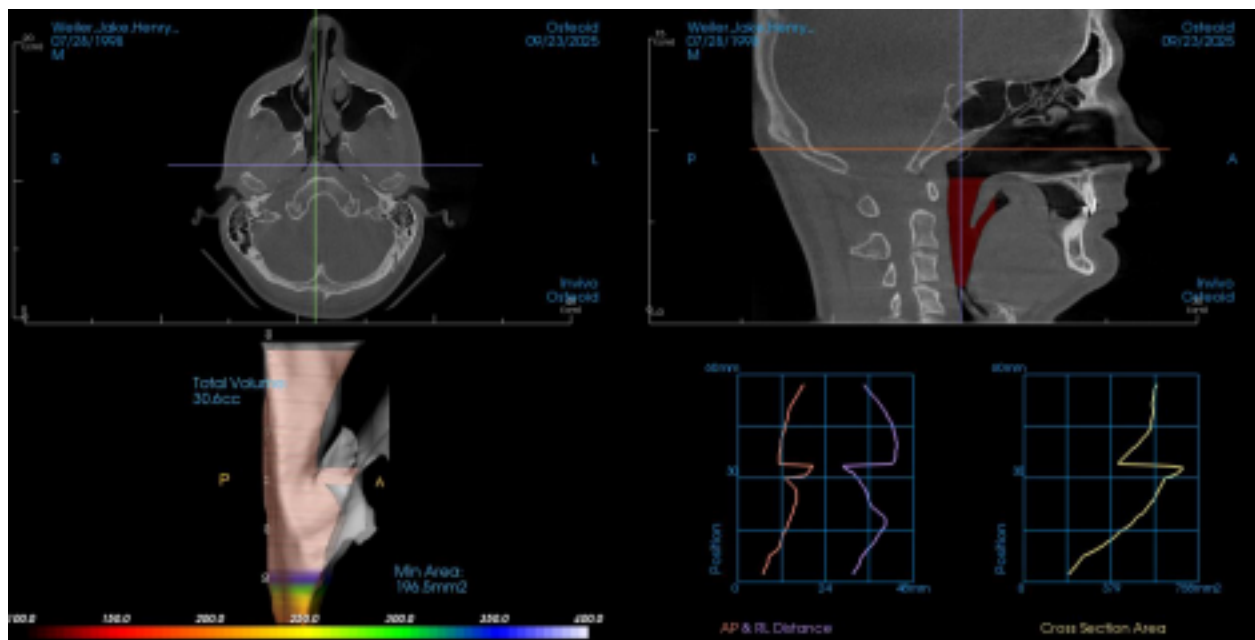


In this occlusal scheme, the mandibular dental midline is coincident with the maxillary dental midline. The patient demonstrates 4 mm of overbite with 2 mm of overjet. On the right, a class I canine and molar relationship are noted with good intercuspation and a flat curve of Spee. On the left, a class II canine and molar relationship are noted with good intercuspation and a flat curve of Spee. There is good transverse balance at the 1st molars with approximately 41.7 mm between the maxillary 1st molars as measured from the mesiopalatal cusps and 41.5 mm distance between the mandibular 1st molars as measured from the central fossae.



Bilateral TMJ analysis was performed. The condyles are seated in the fossa bilaterally. The analysis reveals no evidence of bony pathology or degenerative disease.

Jake Weiler, 7/28/1998



An airway analysis was performed showing a minimal cross-sectional area of 196.5 mm², demonstrating that he is at **low risk for severe OSA**.

Overall, the treatment objectives are to correct Mr. Weiler's malocclusion, improve function, and improve facial harmony.

His problem list includes:

1. Maxillary hypoplasia (M26.02)
2. Mandibular hypoplasia (M26.04)
3. Obstructive sleep apnea (G47.33)

We believe Mr. Weiler is a good candidate for orthognathic surgery and continuing with a combined orthodontic and surgical approach is the best way to treat his dental and skeletal discrepancies.

From the above analyses we believe that Mr. Weiler will require continued orthodontic treatment prior to orthognathic surgery. The goal of presurgical orthodontia is to level and align the dentition and coordinate the arches. For the maxillary dentition, we suggest proclining the severely retroclined maxillary central incisors, which will allow for further advancement of the mandible.

Based on our clinical exam and work-up, Mr. Weiler's surgical plan would likely require upper and lower jaw surgery to advance the maxillomandibular complex. A Lefort I osteotomy would allow for advancement for improved facial convexity and advancement of the soft palate. A bilateral mandibular sagittal split osteotomy would allow for a mandibular advancement to correct his maxillomandibular discrepancy. Additionally, a mandibular advancement would help advance the genioglossus muscle and aid his symptoms of obstructive sleep apnea.

Jake Weiler, 7/28/1998

Our recommended surgical treatment plan is:

1. Lefort I osteotomy (CPT 21131)
2. Bilateral sagittal split osteotomies (CPT 21196)

We would very much appreciate your input regarding Mr. Weiler proposed treatment plan. With your consideration, we would like to continue with virtual surgical planning. Thank you, again, for letting us participate in this patient's care. We look forward to working with you to provide an excellent outcome. Please feel free to contact us should you have any questions or concerns in regarding his treatment plan.

Sincerely yours,



Yu Owen Cheng, DMD, MD

Senior Resident, Division of Maxillofacial Surgery
Department of Otolaryngology, Head and Neck Surgery
Mount Sinai West/Downtown, New York

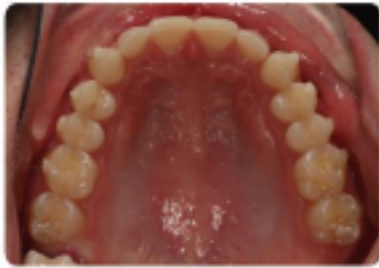


Daniel Buchbinder, DMD, MD

Professor and Chief, Division of Maxillofacial Surgery
Department of Otolaryngology, Head and Neck Surgery
Mount Sinai Health System

PHOTO MONTAGE

Jake Weiler, 7/28/1998



Jake Weiler
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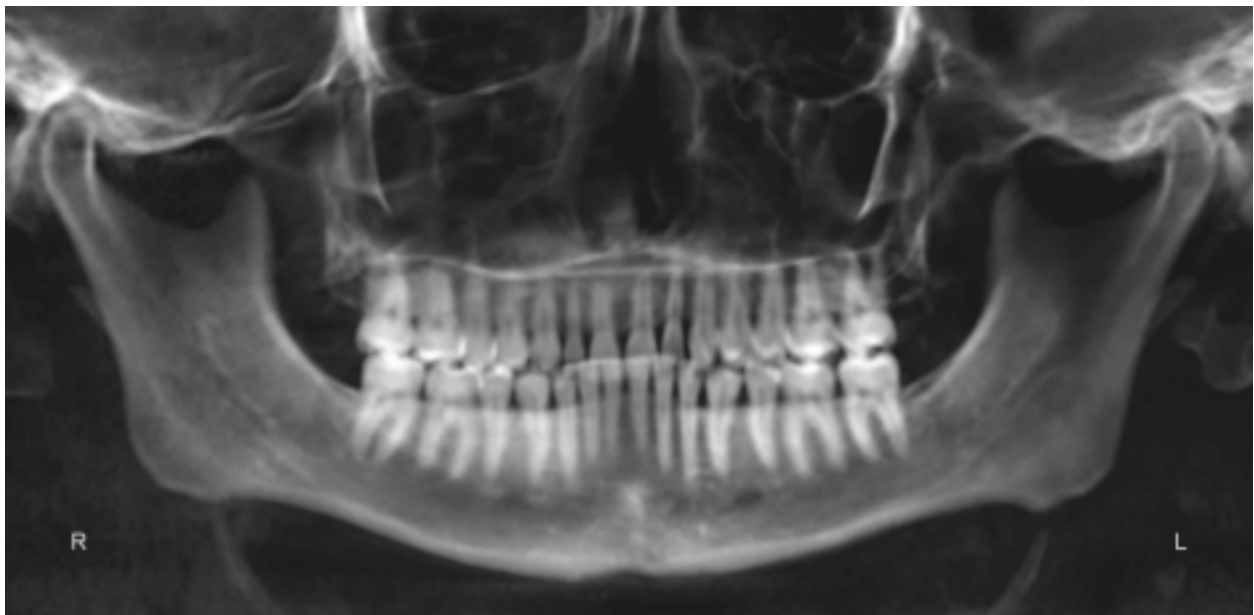
CEPH

Jake Weiler, 7/28/1998



Jake Weiler, 7/28/1998

PANOREX



Jake Weiler, 7/28/1998

POLYSOMNOGRAPHY

Integrative Sleep Center					
	New York Eye & Ear Infirmary	Mount Sinai Downtown - Union Square	Mount Sinai Hospital	Mount Sinai West	Mount Sinai Morningside
	310 East 14th Street 7th/9th Floor New York, NY 10003	10 Union Square East Suite 2HJ New York, NY 10003	1450 Madison Ave New York, NY 10029	1000 10 th Ave 3 rd Floor New York, NY 10019	440 W 114th 10 th Floor New York, NY 10025
☎ (212) 241-5656					

Name: WEILER, JAKE Date of Study: 12/11/2024
Date of Birth: 7/28/1998 Sex: Male

Diagnostic polysomnogram

Summary and Interpretation

Sleep: Total recording time was 490.5 minutes. Total sleep time was 322.0 minutes. Sleep efficiency was 65.6%. The latency to sleep onset was 117.5 minutes. The first REM period started after 117.5 minutes from sleep onset.

Supine REM was seen. **Oral appliance was used during this study.**

Sleep Stages Distribution: Stage N1: 30.5 min. (9.5%)

Stage N2: 167.5 min. (52.0%)

Stage N3: 87.5 min. (27.2%)

Stage REM: 36.5 min. (11.3%)

Total Arousal Index was 31.3/hour.

Spontaneous Arousals: 6.5/hour. Respiratory Arousals: 24.6/hour

Periodic Limb Movement Index: 25.5/hour

Periodic Limb Movement Arousal Index: 0.2/hour

Respiratory Events: The patient had 0 obstructive apneas; 0 central apneas; 24 hypopneas (with 4 % desaturation criteria); and 159 hypopneas with 3% desaturation and arousals. There was intermittent flow limitation and paradoxical chest movement. Normal saturations throughout the study.

Apnea Hypopnea Index (AHI 4%): 4.5/hour

Apnea Hypopnea Index (AHI 3A): 29.6/hour

The lowest O2 saturation was: 89%

Cumulative O2 desaturation below 90% was (hh:mm:ss): 0:00:7.0

Cumulative O2 desaturation below 88% was (hh:mm:ss): 0:00:0.0

ECG: normal sinus rhythm

Summary: Moderate residual obstructive sleep apnea with oral appliance in place, in supine position. Periodic limb movements. Low sleep efficiency with prolonged sleep onset.

If there is insomnia, treatment would likely be helpful.

Clinical correlation needed. Follow up visit with sleep medicine.

Sleeping with your head elevated and/or on your side/front may help your breathing.

Sincerely yours,



Jason Bronstein, MD

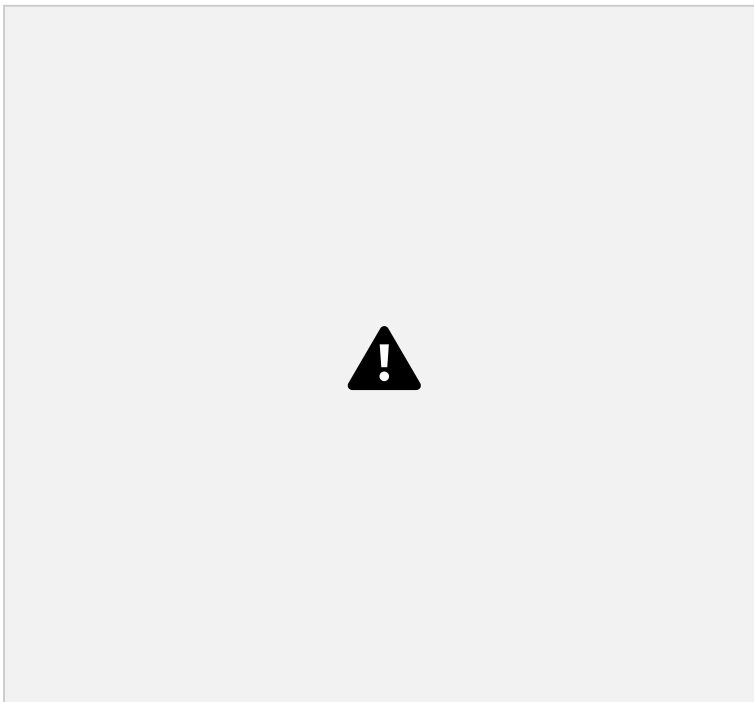
Attending Physician, Mount Sinai Integrative Sleep Center

Jake Weiler, 7/28/1998

STEINER + WITS

Group/Measurement	Value	Norm	Std Dev	Dev Norm
SNA (°)	77.4	82.0	3.5	-1.3 *
SNB (°)	76.0	80.9	3.4	-1.4 *
ANB (°)	1.4	1.6	1.5	-0.1
Occ Plane to SN (°)	10.0	14.4	2.5	-1.8 *
Pog - NB (mm)	8.6	3.0	1.7	3.3 ***
MP - SN (°)	17.3	33.0	6.0	-2.6 **
FGA (MP-FH) (°)	9.8	22.9	4.5	-2.9 **
Interincisal Angle (U1-L1) (°)	156.3	130.0	6.0	4.4 ****
U1 - SN (°)	94.8	103.1	5.5	-1.5 *
U1 - MA (mm)	1.3	4.3	2.7	-1.1 *
U1 - MA (°)	17.4	22.8	5.7	-1.0 *
L1 - NB (mm)	-0.7	4.0	1.8	-2.6 **
L1 - NB (°)	4.9	25.3	6.0	-3.4 ***
FMIA (L1-FH) (°)	78.6	65.7	8.5	1.5 *
IMFA (L1-MP) (°)	91.6	95.0	7.0	-0.5
Lower Lip to E-Plane (mm)	-9.3	-2.0	2.0	-3.6 ***
Upper Lip to E-Plane (mm)	-7.6	-8.0	2.0	0.2
Soft Tissue Convexity (°)	130.4	130.0	4.0	0.1
Wits Appraisal (mm)	3.3	-1.0	1.0	4.3 ****

Jake Weiler, 7/28/1998
COGS



DOWNS

Jake Weiler, 7/28/1998



Weiler, 7/28/1998

Jake