



Right TSP →

3.34 cm

← Left TSP

4.40 cm

Dual Energy^03_DE_CarotidAngio (Adult)
DE_CarotidAngio 0.75 I31f F_0.6
Sn Arterial Phase



S

SINUSES CT
Sinuses Fines

R

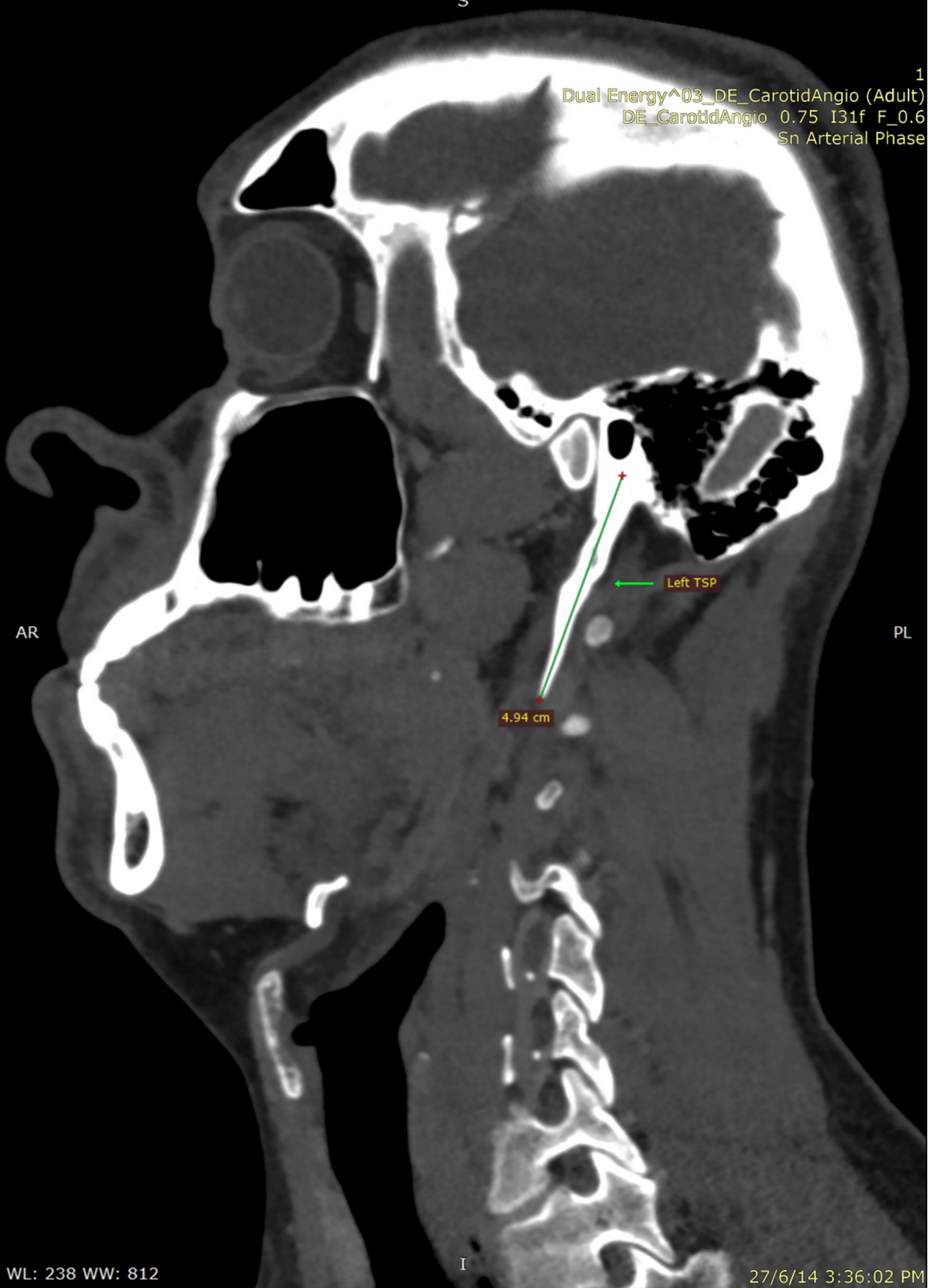
L

← Right TSP

2.52 cm

I

Dual Energy^03_DE_CarotidAngio (Adult)
DE_CarotidAngio 0.75 I31f F_0.6
Sn Arterial Phase



4.94 cm

Left TSP

S

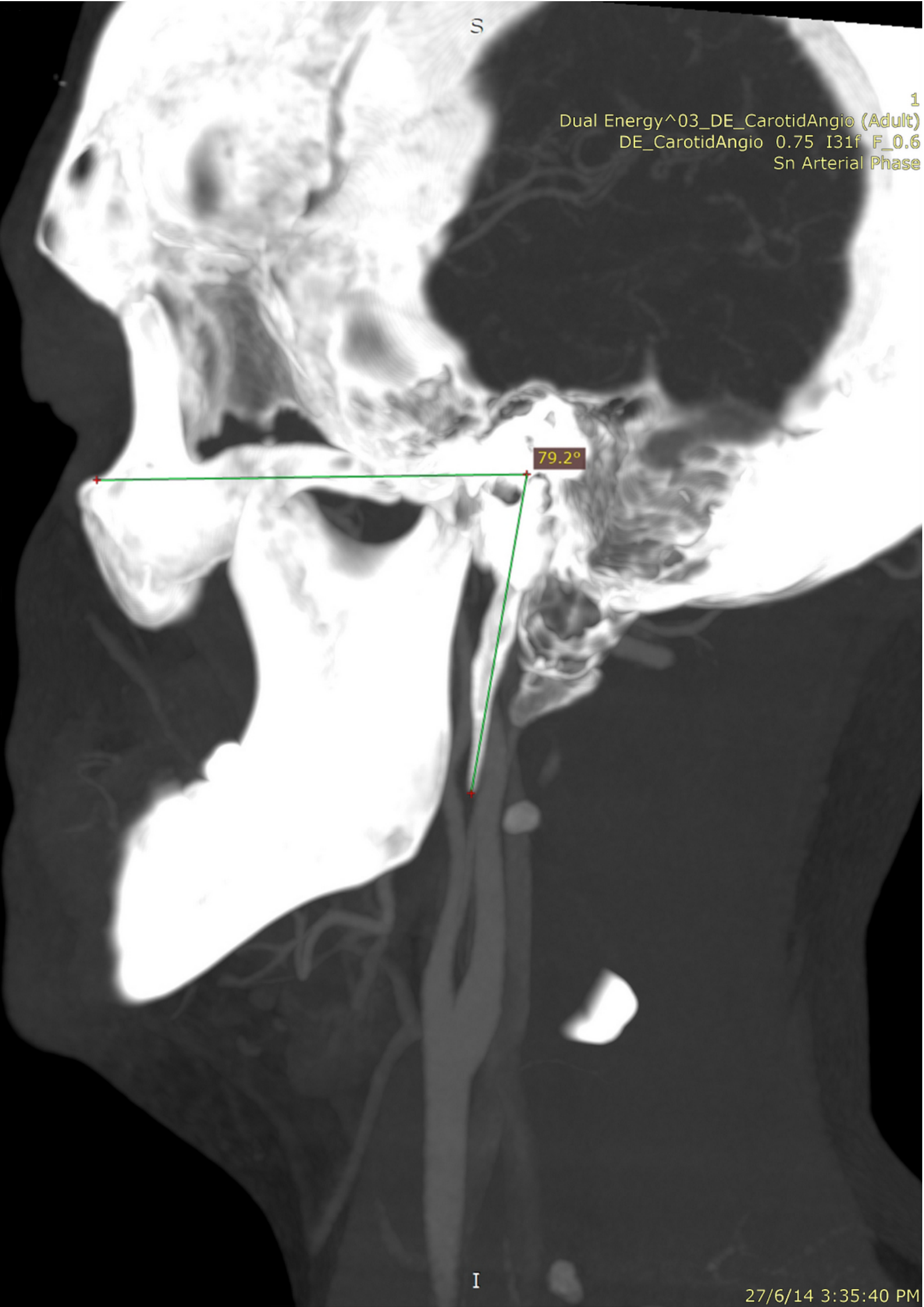
1
Dual Energy^03_DE_CarotidAngio (Adult)
DE_CarotidAngio 0.75 I31f F_0.6
Sn Arterial Phase

63.2°

I

27/6/14 3:35:40 PM





S

1

Dual Energy^03_DE_CarotidAngio (Adult)

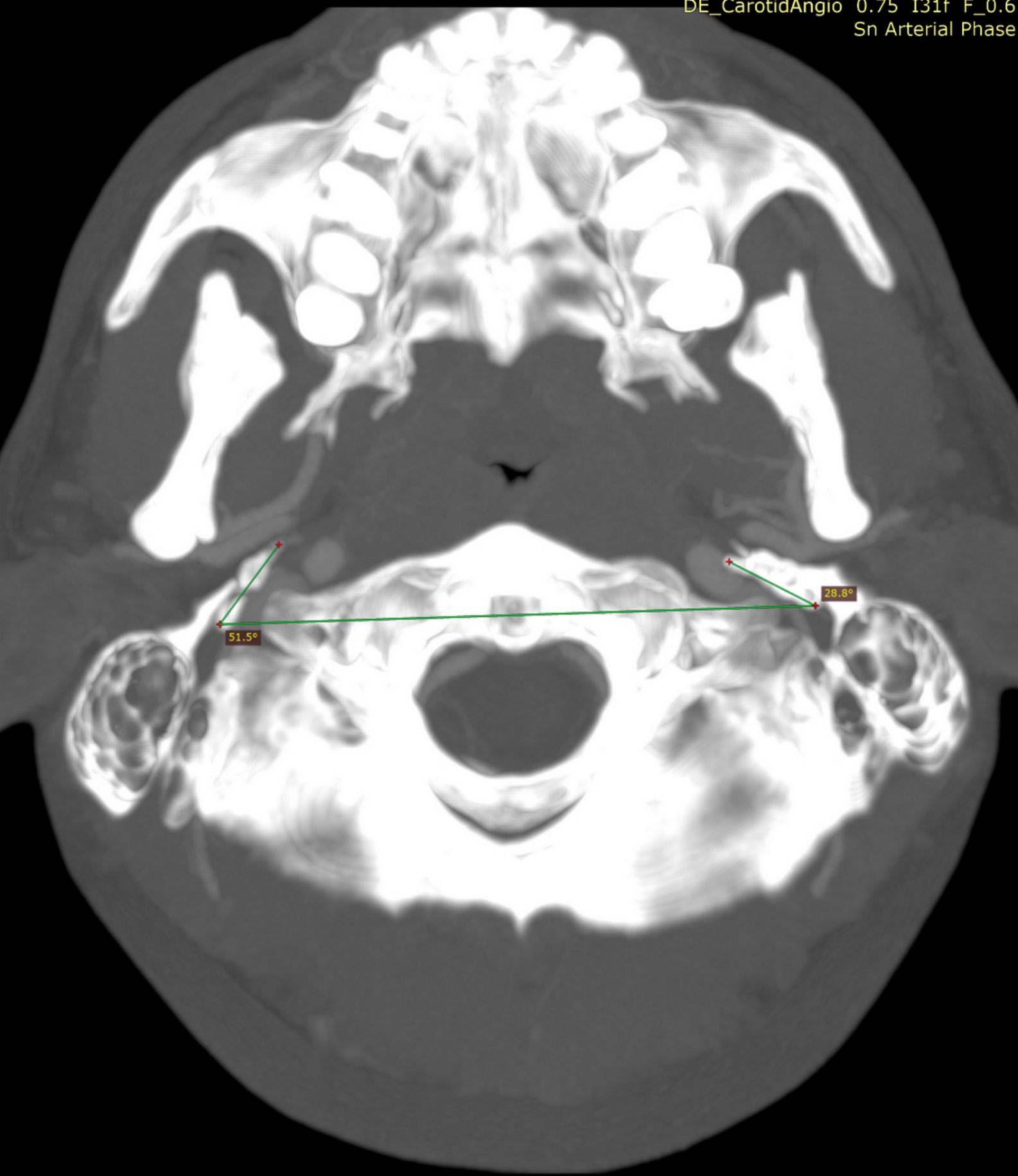
DE_CarotidAngio 0.75 I31f F_0.6

Sn Arterial Phase

79.2°

I

27/6/14 3:35:40 PM





M

S

1

Dual Energy^03_DE_CarotidAngio (Adult)
DE_CarotidAngio 0.75 I31f F_0.6
Sn Arterial Phase

A

P

2.18 mm

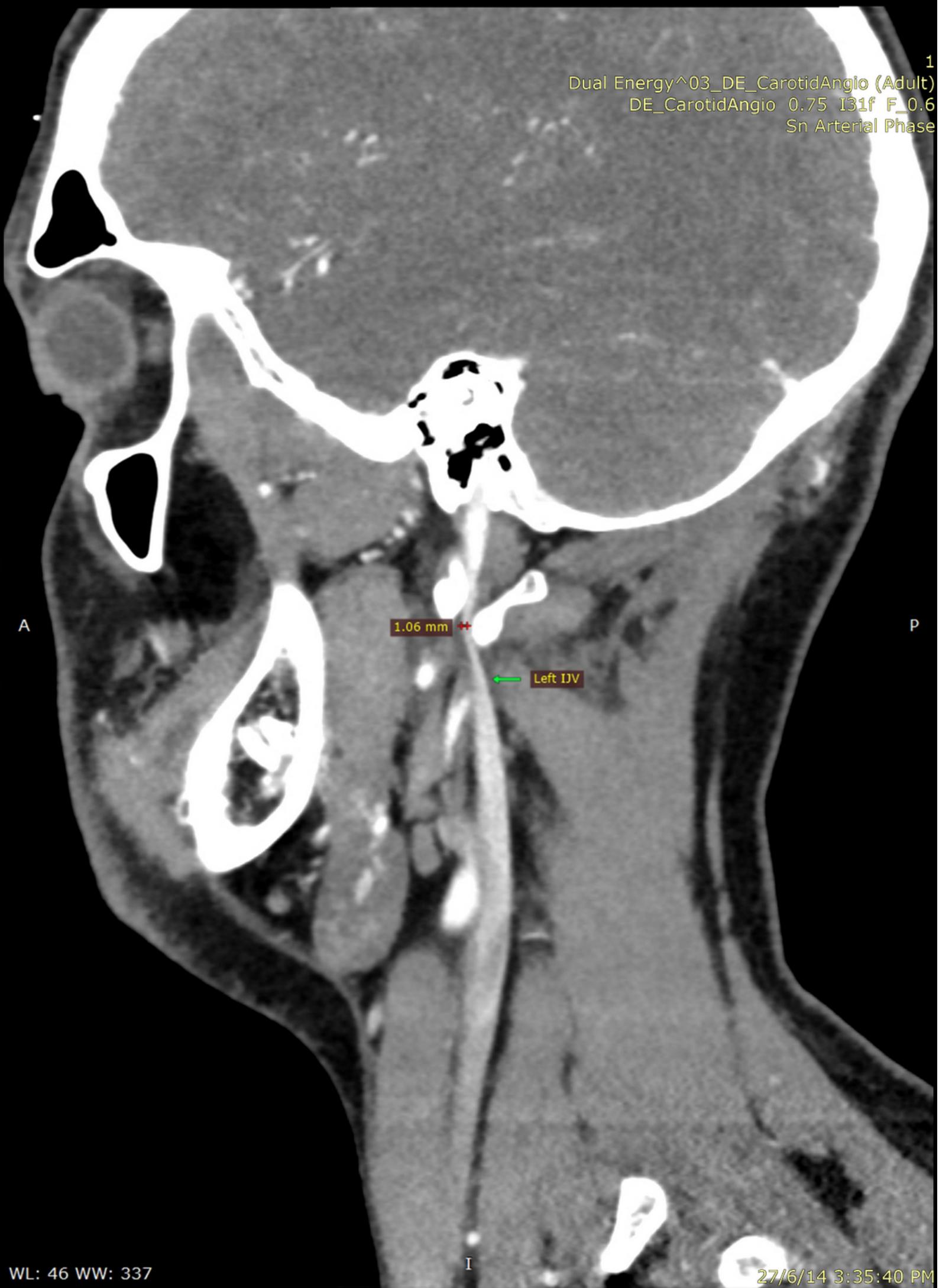
Right IJV

I

WL: 74 WW: 320

27/6/14 3:35:40 PM

Dual Energy^03_DE_CarotidAngio (Adult)
DE_CarotidAngio 0.75 I31f F_0.6
Sn Arterial Phase



A

P

1.06 mm

Left IJV

S

1
Dual Energy^03_DE_CarotidAngio (Adult)
DE_CarotidAngio 0.75 I31f F_0.6
Sn Arterial Phase

A

P

1.06 mm ↔

← Left IVV

I

A

1
Dual Energy^03_DE_CarotidAngio (Adult)
DE_CarotidAngio 0.75 I31f F_0.6
Sn Arterial Phase

R

Right IJV
Area=0.2667 cm²
P=2.63 cm



L

Left IJV
Area=0.04897 cm²
P=8.40 mm



P

Dual Energy^03_DE_CarotidAngio (Adult)
DE_CarotidAngio 0.75 I31f F_0.6
Sn Arterial Phase



R

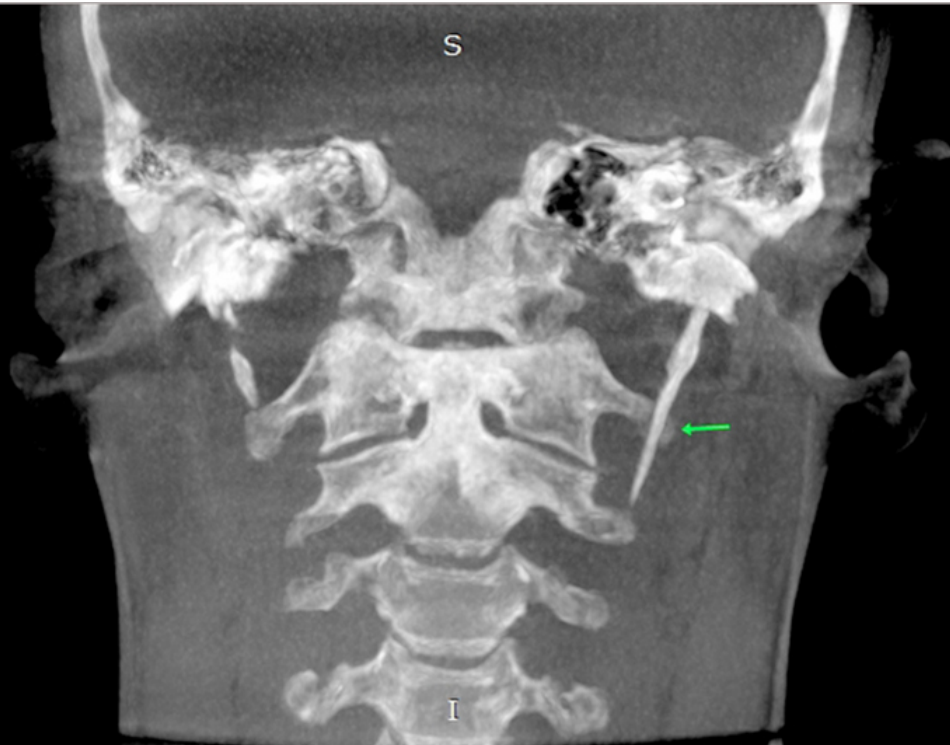
L

Right IJV
Area=0.3921 cm²
P=2.83 cm

Left IJV
Area=0.02803 cm²
P=6.55 mm

MIP 7.8mm

R



WL: 152 WW: 1114

MPR

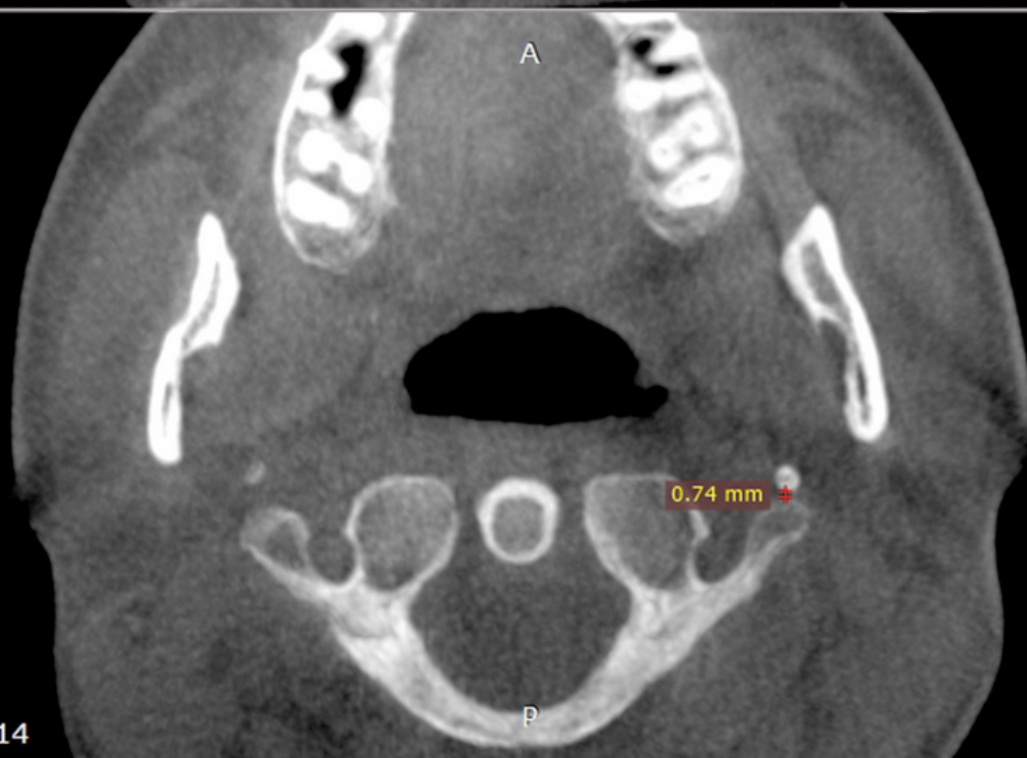
A



WL: 152 WW: 1114

MIP 1.7mm

R



WL: 152 WW: 1114

My findings

Measurement	My result	Average ¹	Difference
Right styloid length	43mm	26mm	65% higher
Right styloid medial angle	51°	74°	31% lower
Right styloid anterior angle	63°	62°	2% higher
Right IJV diameter (C1 level)	2.1mm	9.3mm	77% lower
Right IJV cross-sectional area (C1 level)	26mm ²	66mm ²	61% lower
Left styloid length	49mm	26mm	88% higher
Left styloid medial angle	28°	74°	62% lower
Left styloid anterior angle	79°	62°	27% higher
Left IJV diameter (C1 level)	1mm	8.7mm	89% lower
Left IJV cross-sectional area (C1 level)	2.8mm ²	47mm ²	94% lower

- Contrast material density reduced in left IJV.
- Asymmetrical transverse processes of C1 vertebra.
- The report from a 2014 CT scan notes “There is moderate focal narrowing of the left internal jugular vein just posterior to the left styloid process”.

Queries

- Compression of IJVs and nerves due to elongated and segmented / fractured, abnormally angulated styloids?
- Asymmetry of transverse process of C1 related to abnormal left styloid?
- Possible venous variant Eagle Syndrome, with bilateral IJV compression?

My symptoms

Chronic

- Vocal hoarseness, fatigue and tightness.
- Shortness of breath, air hunger, breathing difficulty, airway sensitivity, irritation, dry cough, throat muscle tightness.
- Headache, pressure sensation in head.

¹ Morphometric study of the styloid process of temporal bone. J Clin Diagn Res. 2014 / Locating the optimal internal jugular target site for central venous line placement. J Clin Anesth. 2016 / Variability in the Cross-Sectional Area and Narrowing of the Internal Jugular Vein in Patients Without Multiple Sclerosis. AJR Am J Roentgenol. 2016

- Insomnia, poor quality sleep.
- Brain fog, poor memory.
- Dizziness, lightheadedness, unsteadiness.
- Feeling sick, fatigued, exhausted, malaise.
- Congested nose and sinuses.
- Tinnitus, sound hypersensitivity.
- Eyes dry, sore, burning, fatigued.
- Neck clicking, snapping when moving head.
- Muscle pain and tightness in neck, head, jaw, shoulders, back, legs.
- Reflux, nausea, constipation, diarrhoea.
- Difficulty swallowing, aspiration.
- Nocturnal bruxism.

Intermittent

- Pain / burning / tingling sensations in my neck, throat, jaw, palate, sinuses, base of skull, left ear, shoulder, chest. Left side mainly. Lasts for hours. Unresponsive to analgesics.
- Headache, pulsatile cranial pressure sensation, brain fog.
- Shortness of breath, upper airway burning and irritation. Coughing.
- Tachycardia, palpitations.
- Faintness, unsteadiness, presyncope.
- Dry eyes.

Triggers

- Looking downwards, and to the left. Moving head laterally to the right.
- Opening jaw wide, yawning, laughing, talking, swallowing.
- Exertion.
- Raised heart rate / blood pressure.
- Lying horizontal.

Mitigation

- Stretching my neck up and to the right.
- Sleeping with head elevated and tilted to the right side.
- Applying ice packs to the left side of my neck and head.

History

- Symptoms began at age 5 after a face / jaw injury resulting in dental avulsion.
- Worsening rapidly in the last decade.
- Chronic symptoms now unbearable. Quality of life critically low. Limiting every aspect of life. Sleep is very bad. Mild exertion is unbearable. The only

speaking I've done since February has been in doctors appointments, etc, and I suffer afterwards for many hours. To communicate, I have to type and use sign language with my family.

Surgical history

- Septorhinoplasty and sinuplasty, 2001.
- Revision sinus and turbinate surgery, 2002.
- Nissen Fundoplication, 2011.

Testing completed

- Cardiopulmonary exercise testing.
- ECG.
- 24-hour holter monitoring.
- Right heart catheterisation.
- Coronary angiogram.
- Pulmonary angiogram.
- Pulmonary function testing + plethysmography.
- Bronchoscopy.
- Polysomnography.
- Muscle biopsy.
- Nerve conduction study.
- Arterial blood gases.
- Gastroscopy.
- 24-hour PH monitoring + oesophageal manometry.

Scans completed

- Carotid CT angiogram, 2014.
- Cervical CT, 2012.
- Dental CT, 2012.
- Brain MRI, 2020.
- Sinus CT, 2018.
- Chest CT, 2020.
- CT coronary angiogram, 2020.
- CT pulmonary angiogram, 2020.
- Cardiac MRI, 2020.

Eagle Syndrome?

Testing?

- Dynamic CT venography. Measurement of styloid lengths and angles.
- Dynamic catheter venography and manometry. IJVs, transverse sinuses, etc.
- MRI venography.
- Doppler ultrasound.

Medication?

- Clopidogrel.

Video

- I have rendered a video to show you on my tablet.
- It includes rotating 3D views of my CT files.
- You can pause and play the video by tapping the screen.