

SPINE FUSION AS TREATMENT FOR PEDIATRIC NEUROMUSCULAR SCOLIOSIS

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AGENDA

- Introduction
- What is Scoliosis?
- Case Presentation
- Closing

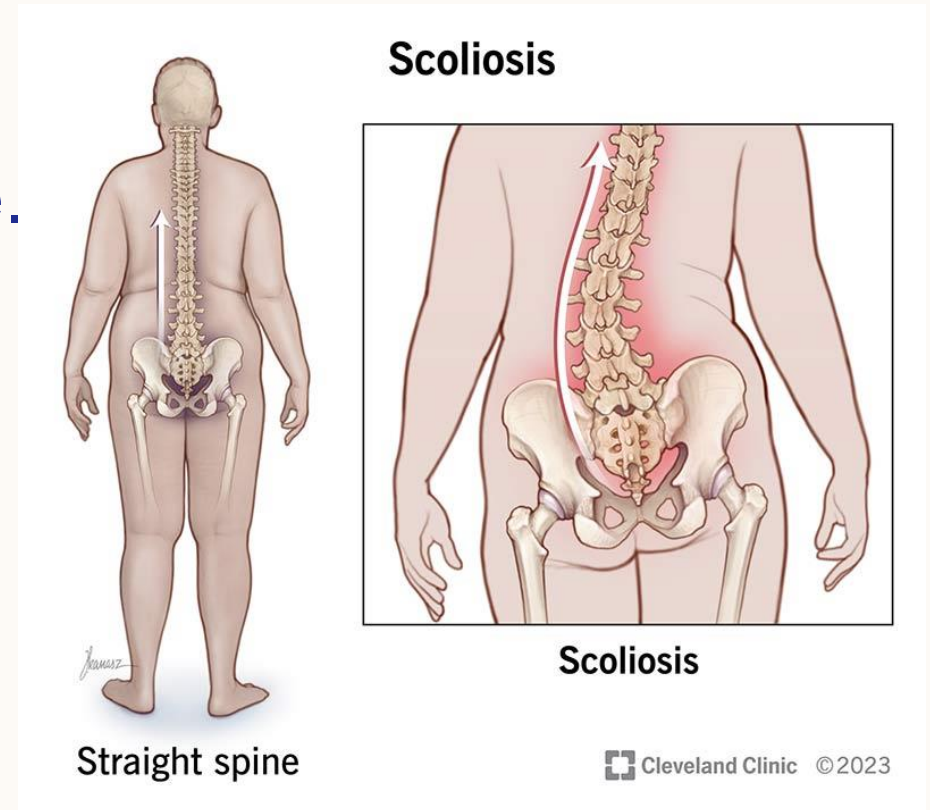
A LITTLE BIT ABOUT ME . . .

- I am from Puerto Rico
- Rising MS2 at Ponce Health Sciences University
- Free Time!
 - Reading
 - Going to the Beach
 - Symphony and Concerts
 - Movies



WHAT IS SCOLIOSIS?

- ❖ Abnormal lateral curvature of the spine.
 - 2-3% of the population
 - The 10° Difference
- ❖ Some Symptoms of Scoliosis
 - Shoulder height Difference
 - Difference in hip height or position
 - Spine discrepancy when bending forward.



TYPES OF SCOLIOSIS

- ❖ Idiopathic
 - Cause Unknown
- ❖ Congenital
 - Developmental Malformation
- ❖ Mechanical
 - Leg Length Discrepancy
- ❖ Neuromuscular
 - Disorders of the nerves and muscles.

TYPES OF TREATMENT

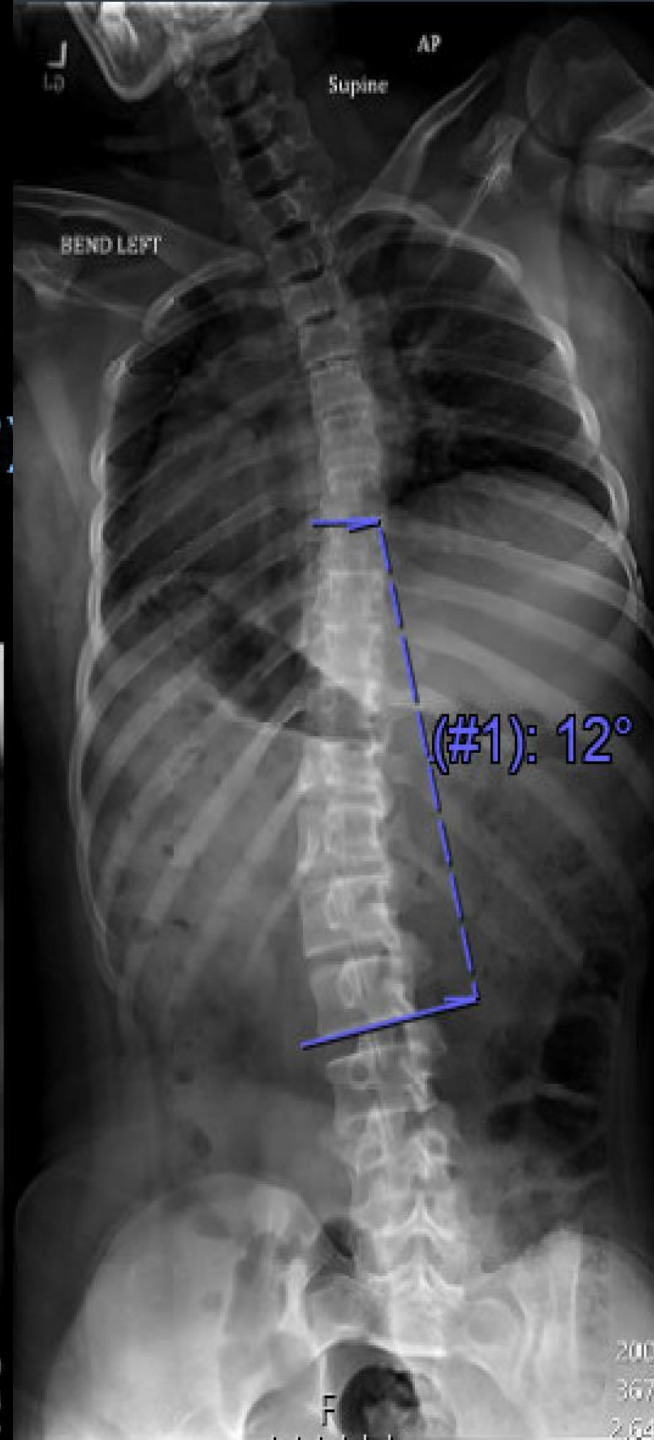
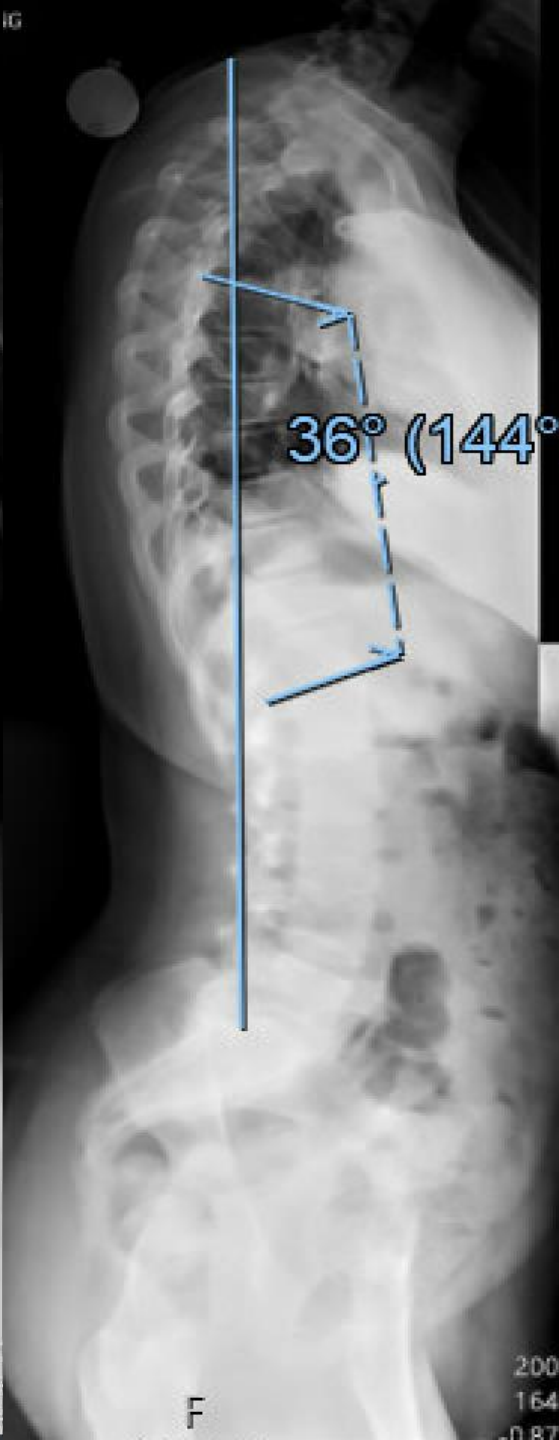
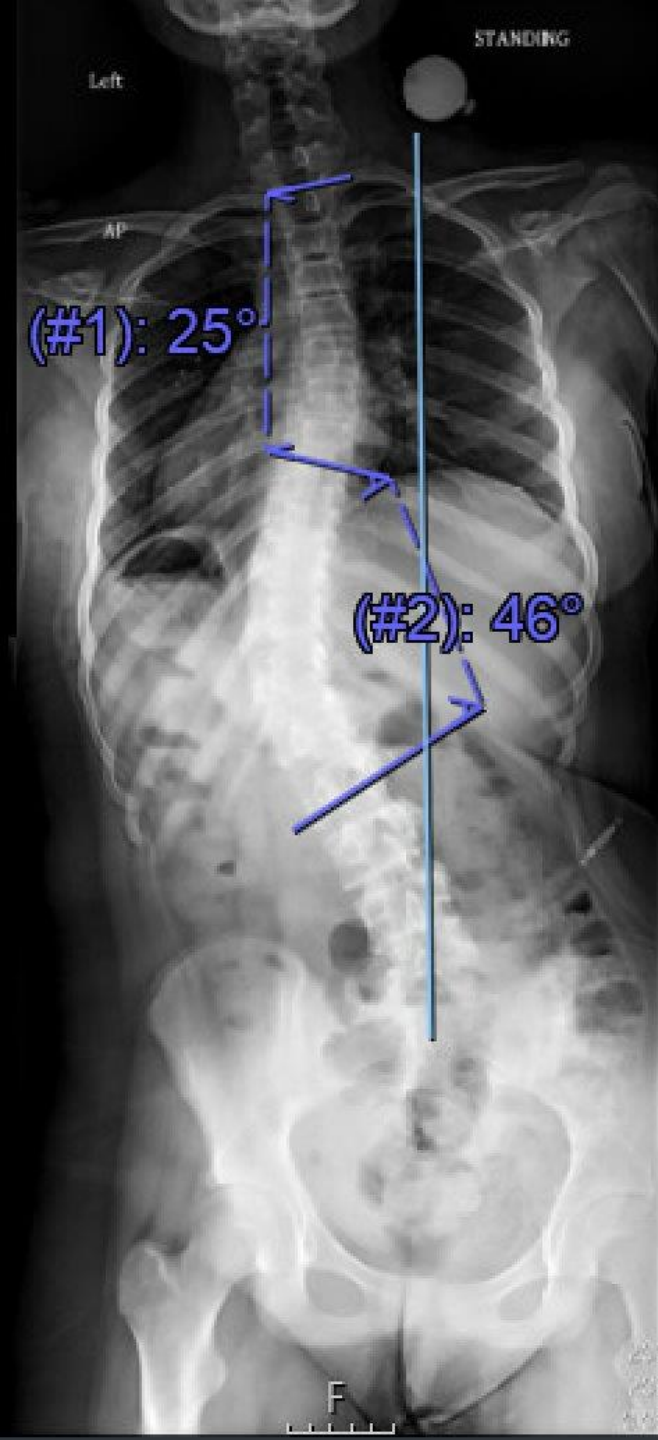
- ❖ Bracing
 - Moderate and Progressive Curves
- ❖ Surgery
 - Sanders Maturity Scale
 - Severe \Rightarrow 40°- 45°
- ❖ No Treatment?
 - Pain and Physical Deformity
 - Heart and Lung Problems



CASE PRESENTATION: PATIENT E.H.

- ❖ 14 y/o F
- ❖ SMS 5
- ❖ Present Medical History
 - Pervasive Developmental Disorder
- ❖ Physical Exam
 - Severe
 - left thoracolumbar curve
 - Left shoulder elevation
 - Equal Leg Lengths

PREOPERATIVE X-RAYS



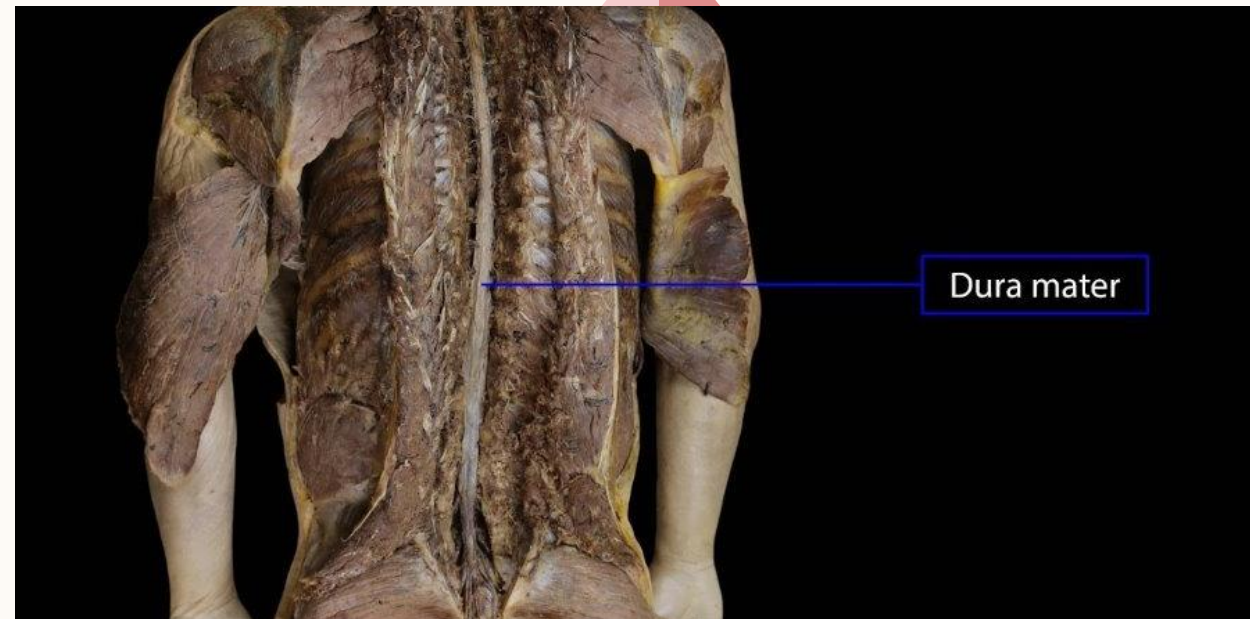
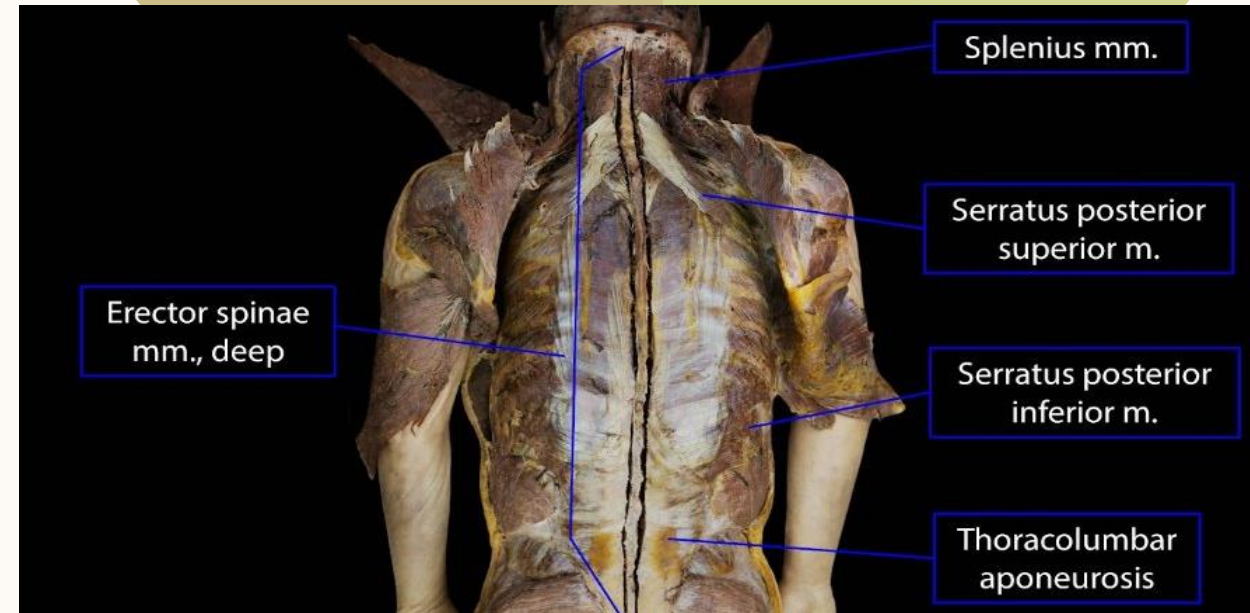
SURGICAL PLAN

❖ Final Diagnosis

➤ Neuromuscular Scoliosis

❖ Plan

➤ T2-L4 Spine Fusion





CHAPTER 4

WHAT IS SCOLIOSIS SURGERY?

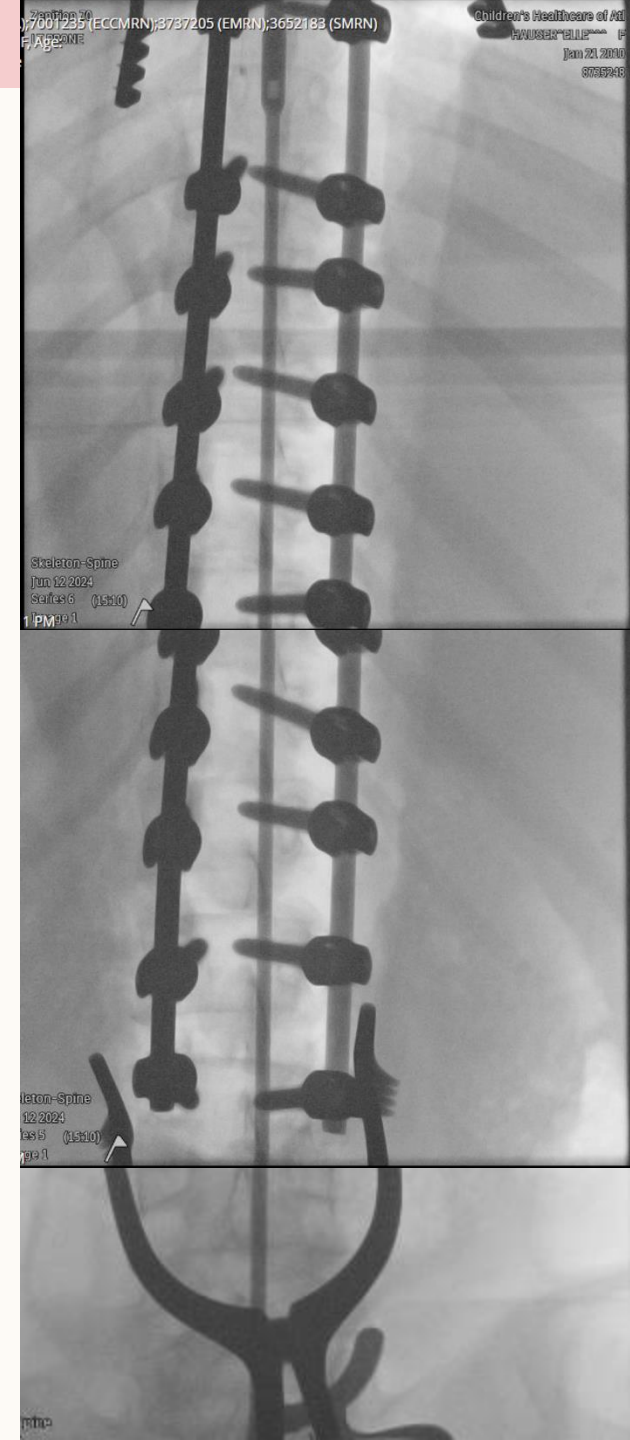
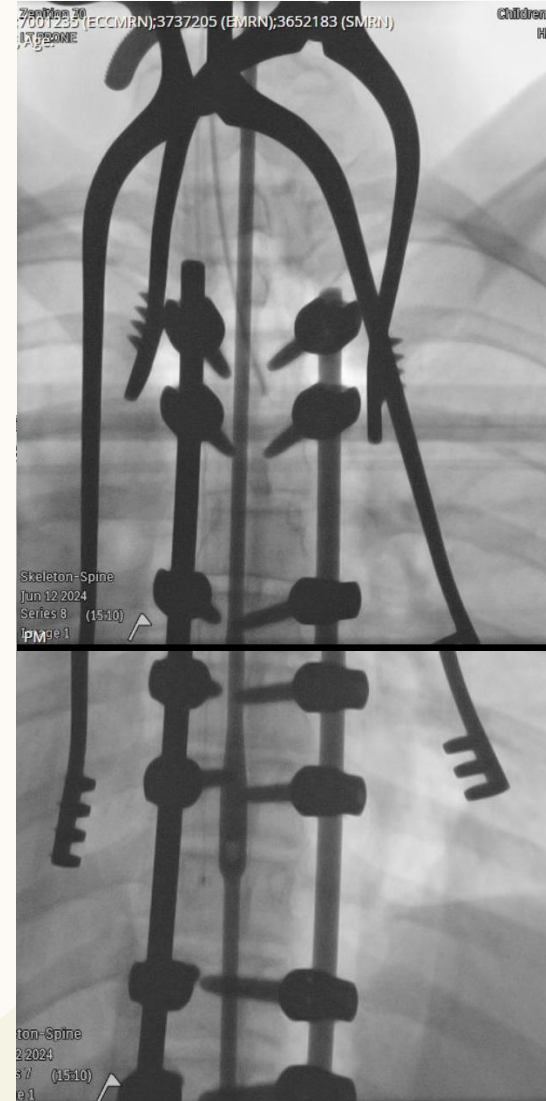
setting
SCOLIOSIS
straight
Supporting Discoveries in Spinal Exploration

 **NUVASIVE**

MAN PLANS AND FATE LAUGHS

❖ Adaptability during Surgery

➤ T3-L3 Fusion



POST OPERATIVE X-RAYS



FINAL TAKEAWAYS

- ❖ Scoliosis is a multifaceted condition that affects every patient in different ways with a variety of outcomes.
- ❖ Surgery keeps you on your toes!
- ❖ There is always more to learn



THANK YOU!

Augustine Conduah MD

Michelle Coleman MD

Robert Bruce MD

Zaamin Hassain MD

Jonathan Morris MD

Aidan Sweeney MD

Amanda Dempsey MD

Greg Erens MD

Bryan Whitfield MD

Ajay Premkumar MD

Erin Williams

Linhan Ha

Marissa Brito

Anjolaoluwa Adegboye

Joshua Taylor

And My Family for
Supporting Me!

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