

# Consecutive Case Series of Surgically Treated Adolescent Idiopathic Scoliosis (AIS) Patients in Puerto Rico

Alexandra Vela Williams, BS<sup>1</sup>; Jael E Camacho Matos, MD<sup>2</sup>; Humberto Guzman, MD<sup>3</sup>

<sup>1</sup>Ponce Health Sciences University, School of Medicine; <sup>2</sup>University of Puerto Rico, School of Medicine, Emergency Medicine Department, San Juan PR; <sup>3</sup>University of Puerto Rico, School of Medicine, Orthopaedic Surgery Division, San Juan PR  
avela24@stu.psm.edu

## Background

AIS is the most common pediatric spine deformity requiring surgery

Puerto Rican AIS data are limited

Study describes baseline characteristics and surgical outcomes

## Study population

73 adolescents (ages 10–18)

44% state-funded insurance

89% female

Mean Cobb at presentation: 44°



## Design / Methods

Retrospective case series (2013–2019)

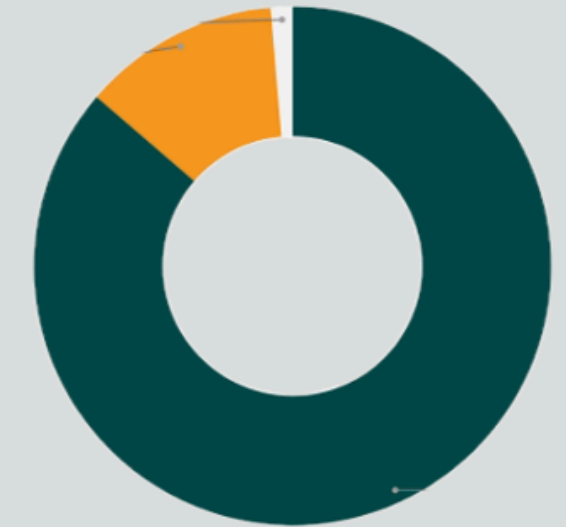
Posterior spinal fusion for AIS

Data: demographics, Cobb angles, surgical timing, complications



Statistical tests: t- test, Wilcoxon, Fisher's exact, Chi-square

## Main Findings



- Curves progressed **+14°** prior to surgery
- 86% no complications**
- Minor: 12% (pain 7%, infection 3%)
- Major: 1.4% reoperation

## Conclusion / Takeaway

AIS patients in Puerto Rico present with advanced curves but experience **excellent postoperative outcomes**. A trend toward higher complications in state-funded patients suggests possible socioeconomic disparities.

