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ADVANCES IN PEDIATRICS

Management of Scoliosis

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Keywords

- Idiopathic scoliosis
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- Spinal deformity

Key points

- Scoliosis refers to a pathologic lateral curvature of the spine in the coronal plane
 of the body that is a prevalent disease seen in the growing pediatric population.
- Three primary types of scoliosis exist in the pediatric population: congenital, neuromuscular, and idiopathic, with the idiopathic form being most common.
- Depending on the type of scoliosis, various treatments, including bracing, casting, physiotherapy, and surgical intervention, can be used. However, screening is critical to initiate early treatment.

INTRODUCTION

Scoliosis is a deformity of the spine often presenting in the first 2 decades of the life [1]. The term scoliosis is derived from the ancient Greek word skolios, meaning curved. It is defined as a lateral curvature of the spine greater than 10° , which is quantified using the Cobb angle on posteroanterior (PA) radiographs (Fig. 1) [2]. The definitive cause for many cases is either unknown or is likely related to an underlying neuropathic or myopathic disease. The overall course and curvature progression for scoliosis has been studied extensively and is somewhat predictable for the idiopathic forms. The 2 primary

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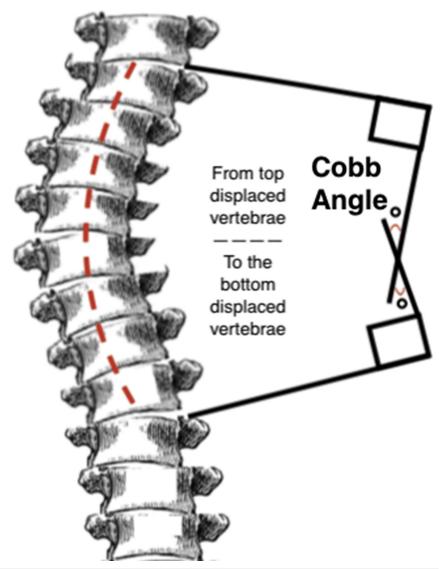


Fig. 1. Technique for measurement of the Cobb angle using radiographic images.

predictors for progression pertain to the degree or severity of curvature and the skeletal maturity of a patient [3].

Scoliosis is traditionally categorized into pathologic, degenerative, congenital, neuromuscular, and idiopathic forms. This article focuses on the latter 3 forms; the former 2 are seen primarily in adulthood. Pediatric scoliosis is subdivided into 3 major groups based on whether the cause can be described. Those that have a definitive root cause are classified as either being congenital or

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