

Appendix 3

Scoliosis management

Treatment options for scoliosis can range from nonsurgical methods, such as observation with repeat X-rays, to surgical methods, such as spinal fusion. Treatment options include the following (note that goals are shown in italics):

- Observation: Regular spine X-rays and clinical exams with a spine specialist *to monitor scoliosis curve for possible progression.*
- Bracing: A spinal brace that applies corrective forces to the spine *to slow or stop scoliosis curve progression.*
- Surgery: Surgery performed *to prevent future progression and improve the scoliosis curve (decrease the Cobb angle).* There are many types of scoliosis surgery. The most common type is spinal fusion, defined as fusing (joining together) two or more vertebrae in the spine; screws and metal rods are typically used to hold the spine in the straightened position and facilitate fusion between bones.

Table A3.1 summarizes these treatment options

Table A3.1. Treatment options for managing scoliosis

Treatment options	Indications	Goals
Observation		
Skeletally immature	Cobb angle less than 20 degrees	Monitor scoliosis curve through repeat X-ray images for possible progression
Skeletally mature	Cobb angle between 30 and 50 degrees	
Bracing		
Skeletally immature	Cobb angle between 20 and 45 degrees	Slow or stop scoliosis curve progression Prevent or delay surgery
Skeletally mature	Not an appropriate treatment once skeletally mature	
Surgery		
Skeletally immature	Cobb angle greater than or equal to 50 degrees	Stop curve progression Improve the spinal curve (decrease the Cobb angle)
Skeletally mature	Cobb angle greater than 50 degrees	Achieve a balanced spine and posture

More information on scoliosis management in CP is available in the book *Congenital, Neuromuscular, Syndromic, and Other Causes* in the **Gillette Children's Healthcare Series**.