

The Application of the Schroth Method in Adolescent Idiopathic Scoliosis



**The Adolescent Idiopathic
Scoliosis**



**The Schroth
Method**



Demonstration



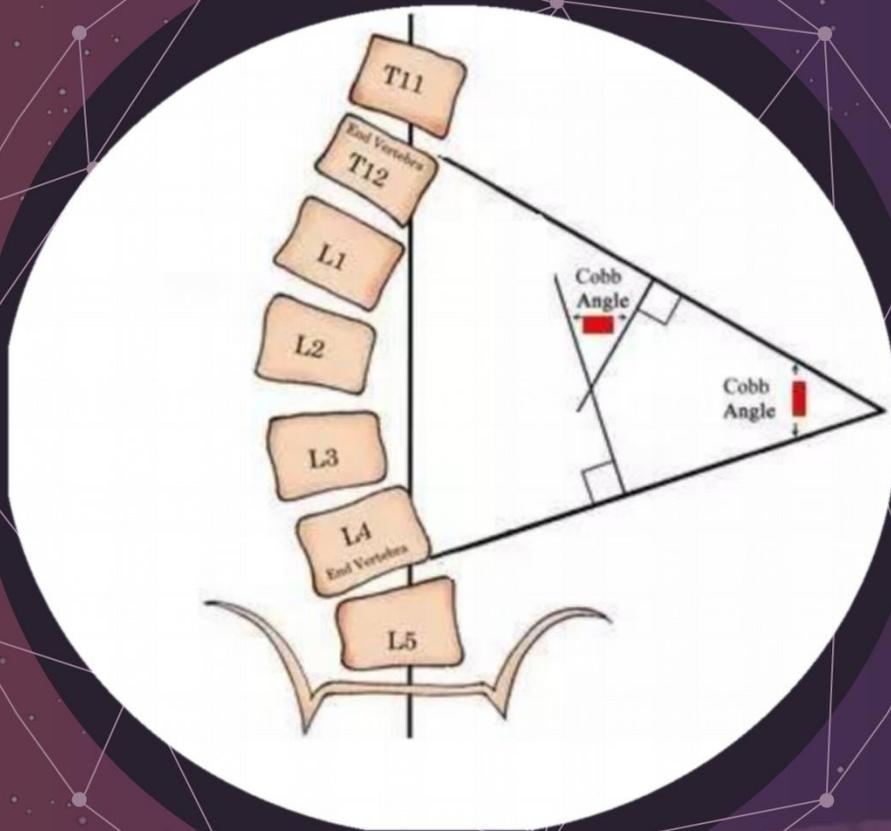
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The Adolescent Idiopathic Scoliosis

01

The Adolescent Idiopathic Scoliosis



Scoliosis is a curve greater than 10° by Cobb method .(Hefti,2013)

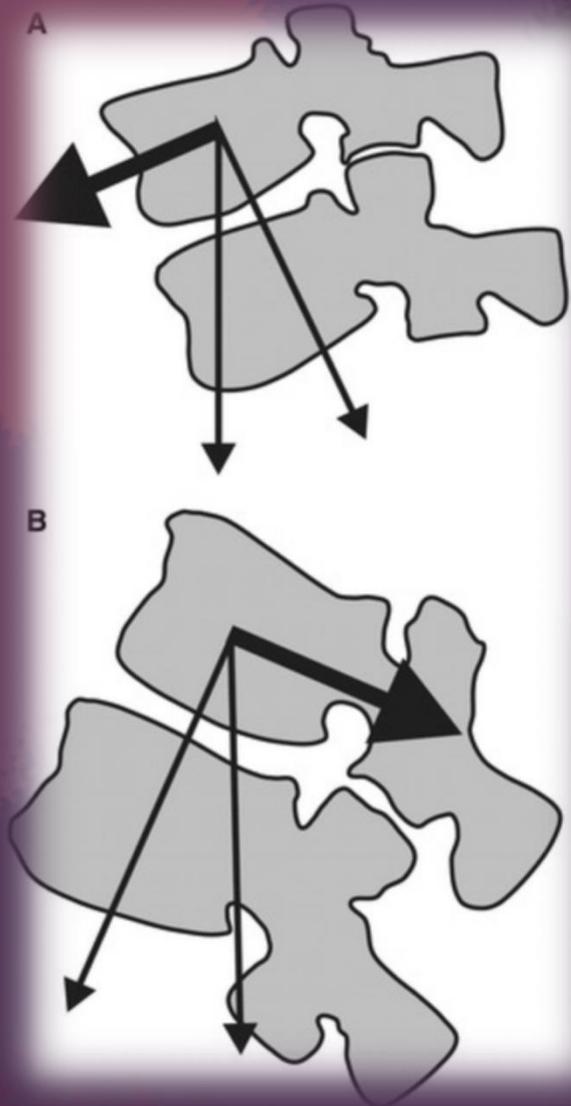
AIS is a scoliosis that starts after the age of ten and has no clear under-lying disease as reason . (Hefti,2013)

(Wechat Official Account:kangfuhuiys,2016.12)



01

The Adolescent Idiopathic Scoliosis



(Orthop,2013)

- **The enhancer :**

The dorsally directed shear loads during the growth.

- **Result :**

A progressive deformation of individual vertebrae and ultimately lead to progressive scoliosis. (Orthop,2013)



01

The Adolescent Idiopathic Scoliosis



(Trobisch, 2010)

- **Asymmetry** of the shoulders, chest, or pelvis .
- **Fibrosis and fatty involution** in the concave side .
- **Muscular atrophy, necrosis, hyaline fibers** in both sides. (Wajchenberg , 2015)

The Physiotherapy in Adolescent Idiopathic Scoliosis



Fig. 1 Dr. Jean Claude de Mauroy, co-inventor of the new Lyon Brace (Asymmetrical Blind Tension Brace)



Fig. 69 Tony Betts, school leader and physical therapist teaching the Side-Shift method (UK)



Fig. 62 Dr. Krystyna Dobošewicz (1931–2007), founder of the DoboMethod (Poland) treatment method of scoliosis



Fig. 22 Axel Hennes, head of the physical therapy department at the University of Cologne



Fig. 32 Scientific Exercise Approach to Scoliosis (SEAS) school leaders Antonio Negrini (a), Michele Romano (b), and Alessandra Negrini (c)



Fig. 78 The Functional Individual Therapy of Scoliosis (FITS) school leaders, Marianna Bialek and Andrzej M'hango



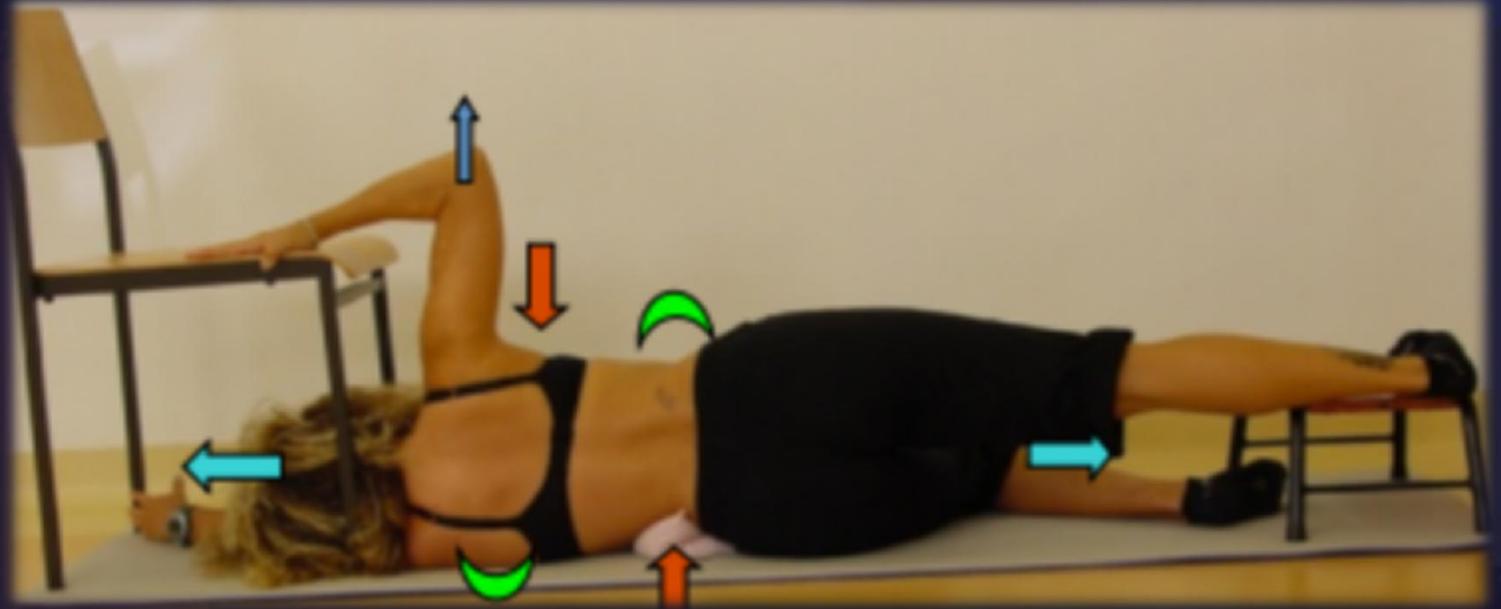


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The Physiotherapy in Adolescent Idiopathic Scoliosis



Fig. 22 Axel Hennes, head of the physical therapy department at the Asklepios Katharina Schroth Spinal Deformities Rehabilitation Centre in Bad Sobernheim, Germany



(Berdishevsky , 2016)

(Berdishevsky , 2016)

- Applied in most countries and even been the gold standard.
- Primarily used for adolescents idiopathic scoliosis. (Berdishevsky , 2016)





2



Introduction of the Schroth Method

Brief Introduction Of Schroth

- Developed by Katharina Schroth.
- A physical therapy treatment approach that uses manual therapy techniques and scoliosis-specific exercises tailored to each individual. (Berdishevsky , 2016)



(Weiss ,2011)

02

The Schroth Method



(Kim KD ,2016)

Goals of the Schroth Method

- Correct spinal rotation and increase lung capacity.
- Restore normal spinal position with pelvic corrections, breathing technique, and stabilizing isometric contractions.
- Improve the posture during routine daily life. (Kim KD ,2016)



The Schroth Method



The Classification System of Schroth

Shoulder block **S**

Thoracic block **T**

Lumbar block **L**

Hip - pelvic block **H**

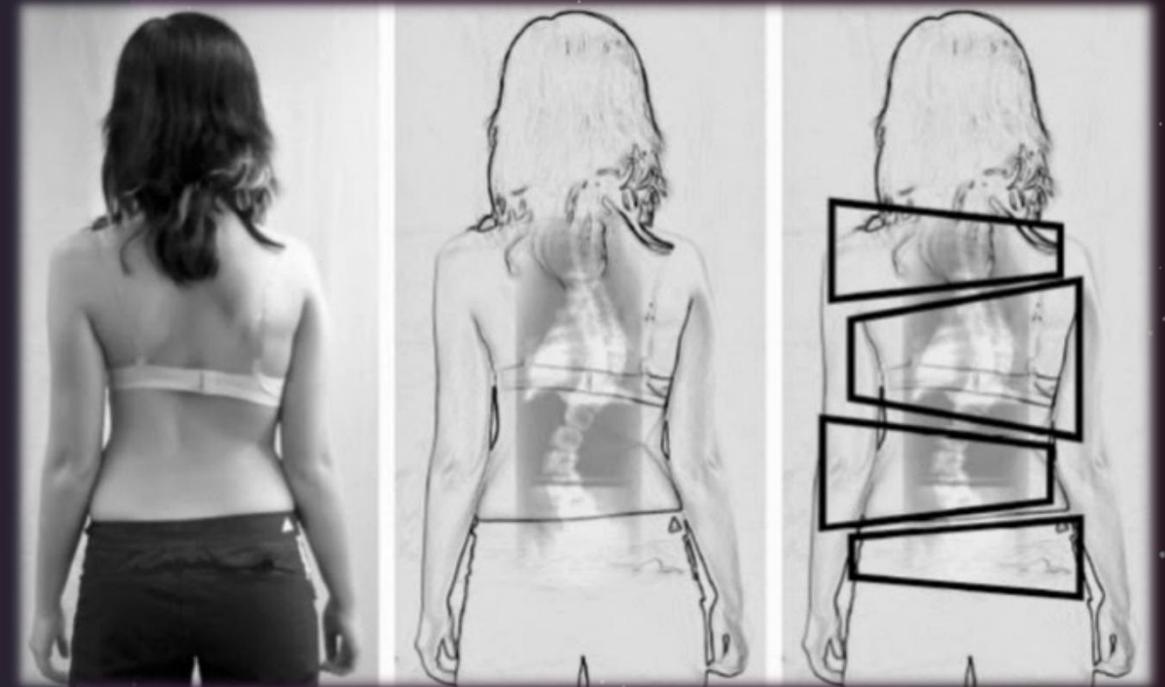
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(Berdishevsky, 2016)

3D Principles of Correction

- Autoelongation (detorsion);
- Deflection;
- Derotation;
- Rotational breathing;
- Stabilization. (Lee HJ,2016)

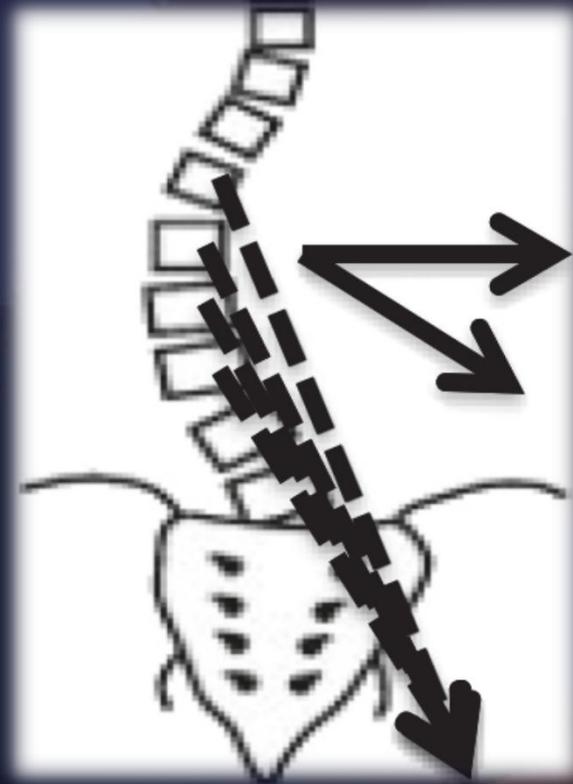


(Lee HJ,2016)

The Schroth Method

The Activation of Muscles

- The iliopsoas
- The quadratus lumborum
- The erector spinae (Kim KD ,2016)





3 Demonstration



The Schroth Exercise



(Berdishevsky , 2016)

1. Rotation Angular Breathing

- Help them know the feeling about breathing with one side

(Berdishevsky , 2016)



The Schroth Exercise



(Berdishevsky , 2016)

2.The Schroth “Sail” Exercise

- During activation, the patient is consciously expanding the left rib cage by contracting the muscles which can adduct shoulder.

(Berdishevsky , 2016)

03

The Schroth Exercise



(Berdishevsky , 2016)

4. "Muscle-cylinder" Exercise

Lie on the lumbar convex side.

- Lumbar convexity is supported by a towel to help align the spine in the horizontal plane.
- Offer a force from right arm to against the chair. (Berdishevsky , 2016)

It is our duty and pride
to improve
the quality of patients' life,
not just
focus on the disease itself...





03 Home Exercise



(Berdishevsky , 2016)

- **Emphasize teaching postural corrections throughout the day**
 - 1) Decrease progression and pain
 - 2) Allow patients to spend more time in leisure activities and to live a normal life. (Berdishevsky , 2016)

Reference

Official Website: <http://www.schrothmethod.com>

Reffered Book : 《脊柱侧弯的三维治疗》

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Thanks for your attention!

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