

Oral presentation

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## Efficacy of spinal orthosis in combination with orthopedic gymnastics in treating patients with idiopathic scoliosis

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### Objective

To investigate the efficacy of spinal orthosis in combination with orthopedic gymnastics for the treatment of patients with idiopathic scoliosis.

### Methods

To achieve the target of muscle contraction on the convex side and muscle extension on the concave side, 40 children with idiopathic scoliosis have worn the spinal orthosis for 23 hours every day. In addition, they performed orthopedic gymnastics for 30 minutes at least once or sometimes twice a day. During the treatment, X-rays were taken periodically to measure Cobb angle.

### Results

After one year, there were 33 children who kept wearing the orthosis and doing the orthopedic gymnastics. Their Cobb angle of the thoracic and lumbar curve had been significantly reduced after the treatment ( $P < 0.05$ ). Patients with single curve idiopathic scoliosis demonstrated more improvement than those patients with double curves ( $P < 0.05$ ).

### Conclusion

Orthosis in combination with orthopedic gymnastics can rectify scoliosis deformity and can be an effective treatment for patients with idiopathic scoliosis.

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