

Posterior Mediastinal Mass Mimicking An Adolescent Idiopathic Scoliosis: A Rare Case Report

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Introduction

Posterior mediastinal mass may cause spinal structure destruction, pain and deformity. In rare circumstances, progressive scoliosis can be induced by a tumour originating from nervous system alongside the spine in skeletally immature children. The most common posterior mediastinal neurogenic tumours are the ganglioneuroma and neuroblastoma. We report a giant dumbbell shaped mass generating painless thoracic scoliosis in a 12 years old girl. She had been misinterpreted as having adolescent idiopathic scoliosis (AIS) for 5 years. This report points out that a rigid and unusual curve pattern should alert orthopaedic surgeon to conduct further investigation for assumed AIS.

Report

This is a report of 16-years-old girl who presented with a 5 years' progressive painless thoracic scoliosis. Her previous development had been normal with no significant past history of illness. Radiographic examination using Cobb's method showed a right thoracic curve measuring from the superior endplate of T6 to the inferior end plate of T12 from 20° in first visit gradually increased to 53° (Fig. 1). However, tracing back to her previous plain radiographs taken 5 years ago, we found out a left intrathoracic dumbbell shaped mass was not interpreted (Fig. 2). MRI revealed a posterior mediastinal soft tissue mass at the apex of the thoracic curve from T4 to T10 (Fig. 3).

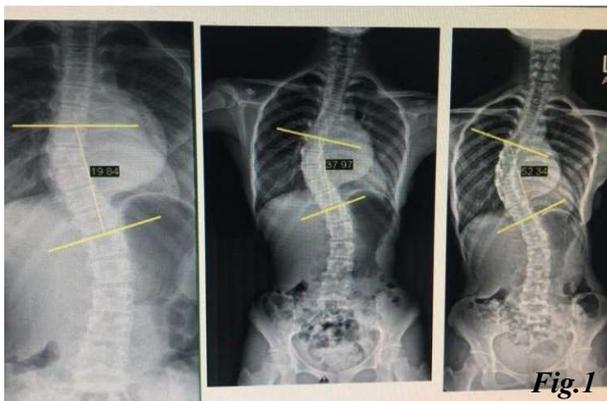


Fig.1



Fig.2



Fig.3

Conclusion

AIS is the most common form of spinal deformity. Curves progress rapidly during the adolescent growth spurt and are more common in girls. As illustrated in our case, stiffness and a rapid progression of the curve should raise suspicion of an underlying pathological cause. We report here on the case of a 16-year-old girl with a giant ganglioneuroma that had been erroneously treated for scoliosis over several years. Therefore, a careful preoperative survey is mandatory for patients diagnosed with scoliosis with a rigid or rapidly progressive curve.

References

1. Lai, P.-L. et al. Spinal Ganglioneuroma Mimicking Adolescent Idiopathic Scoliosis. Paediatric Neurosurgery 2005, 41(4), 216–219.
2. Winter RB: Scoliosis associated with ganglioneuroblastoma: A case report with 17-year follow-up. J Spinal Disord 1992; 5: 122–124.