

# A Case Report: Scheuermann Disease With Kyphoscoliosis At Thoraco-Lumbar Vertebra Correction By Posterior Instrumentation With Pedicle Screws & Smith-Peterson Or Ponte Procedure.

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## INTRODUCTION:

Scheuermann kyphosis described as rigid kyphosis at thoracic or thoroacolumbar spine in adolescents mostly associated with vertebral body wedging, endplate irregularity and premature disc degeneration. However scheuermann kyphosis associated with scoliosis is a rare case.

## CASE REPORT:

A case of 16 year old male referred from primary center complaining of chronic back pain with back deformity for the past 3 years. Patient also often complained of chest discomfort due to coronal & saggital plane deformity. However neurological deficit is unremarkable. Radiographic imaging showed thoraco-lumbar scoliosis with Cobb's angle  $47^{\circ}$  between T11 & L4, thora-columbar hyperkyphosis with kyphotic angle  $100^{\circ}$  between T6 & L4. A magnetic resonance imaging showed anterior wedging of the T11 to L2 vertebral bodies, with endplate irregularity and schmorl's nodes. Then patient underwent posterior instrumentation with pedicle screws and Smith-Peterson / Ponte osteotomy done at level L3/L4. Subsequent follow up in clinic, patient showed good result with back pain reducing..

## DISCUSSIONS:

Because of lack literature regarding natural history of Scheuermann kyphosis, the treatment indication are debatable. Non surgical treatment with bracing may result with modest correction on some patient. For this patient , surgical correction relieved the pain and corrected the deformity with hyperkyphosis correction is  $47^{\circ}$  & Cobb's angle  $10^{\circ}$  postoperatively.

## CONCLUSION:

Surgery appears to be the only treatment to significantly improve the kyphotic deformity

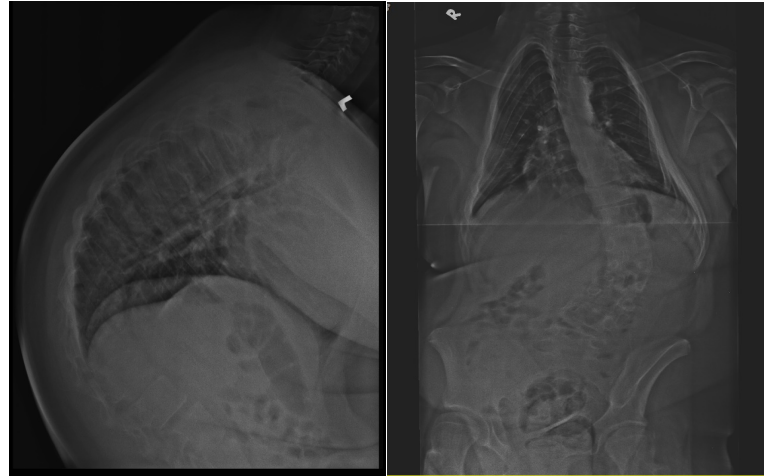


Figure 1 : pre-operative x-ray

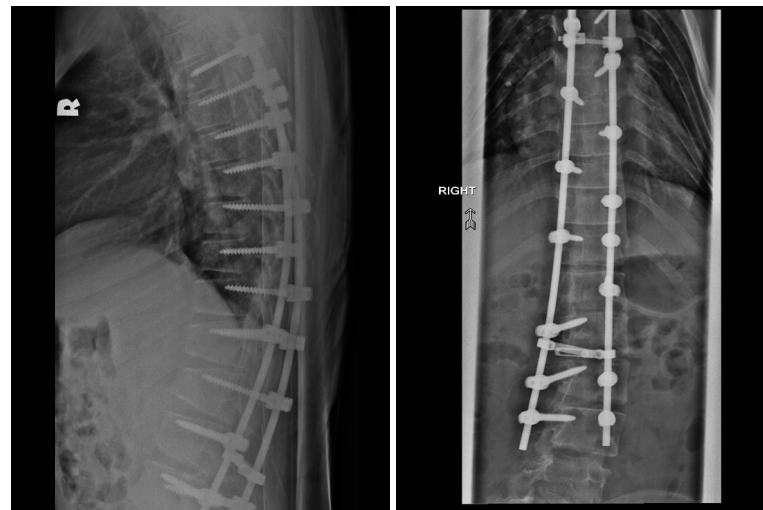


Figure 2: post- operative x-ray

associated with Scheuermann kyphosis. The risk of surgery must be clearly explained to the patient & parent before surgery.

## REFERENCES:

1. Lowe et al. Evidence based medicine: Analysis of Scheuermann Kyphosis. Woodridge Spine Center.
2. Cobden A, et al. Posterior-only approach with pedicle screws for the correction of the Scheuermann's kyphosis. Asian Spine J 2017