

Figure 1. Radiographs before growing rod treatment. Standing whole spine radiographs showed scoliosis of 53° at T1–T7, 103° at T7–L1, and 60° at L1–L5 and kyphosis of 61° at T9–L3.

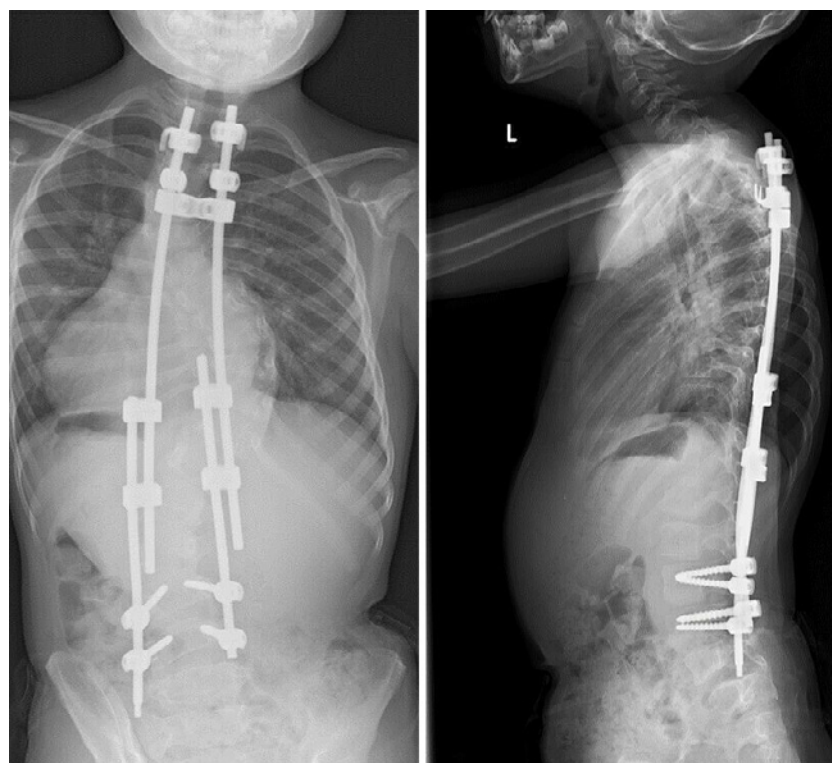


Figure 2. Radiographs after growing rod placement. At 4 years of age, growing rod surgery was initiated, placing the proximal anchor at T2 and T3 and distal anchor at L3 and L4, with the dual growing rods connected using side-to-side connectors.

ment was higher because of leptosome and fragility of the soft tissues and bone. Furthermore, the high complication rate related to implants of growing rod surgery has been re-

ported^{3,5,6}. To prevent complications in the treatment of this disease, we should consider a two-term operation plan that precedes the installation of an anchor, reduction of damage

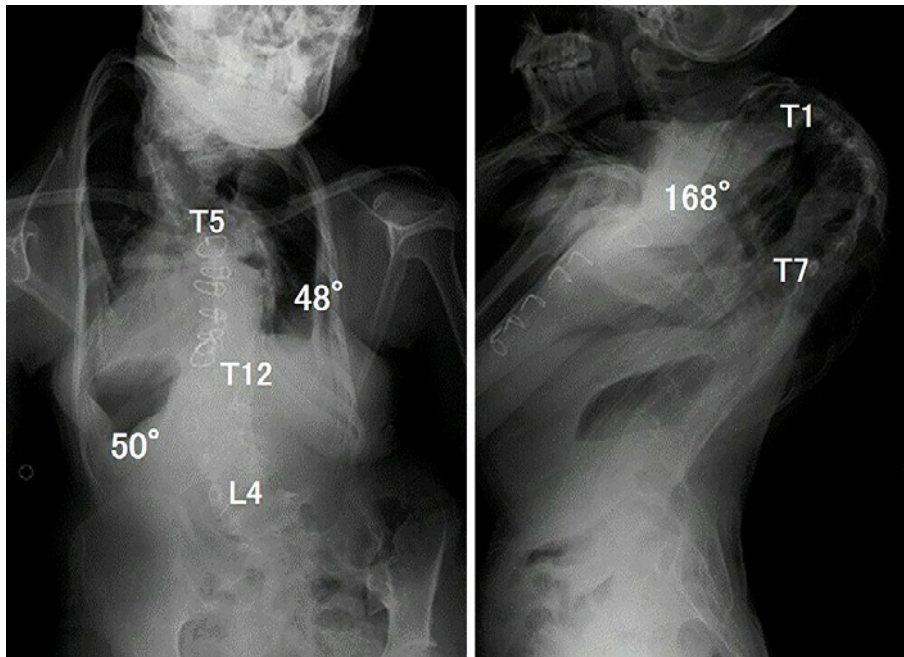


Figure 3. Radiographs before final correction and fusion surgery.

Kyphosis at the upper thoracic area significantly progressed, after all spinal implants were removed because of wound infection. At 14 years of age, kyphosis reached 168°.

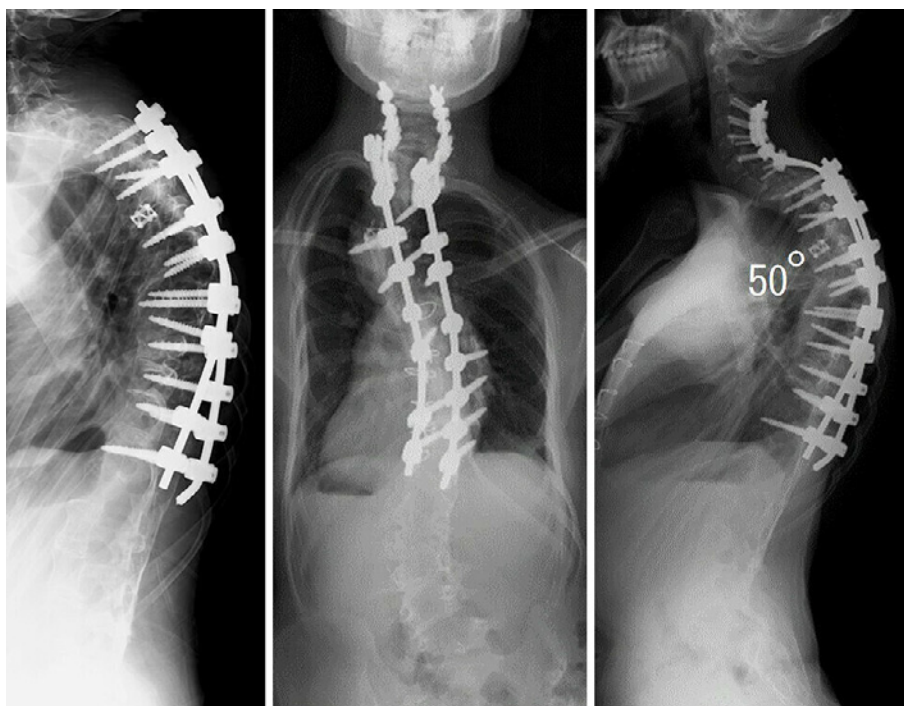


Figure 4. Radiographs after final correction and fusion surgery with T4 VCR.

After T2–T12 posterior surgery with T4 posterior vertebral column resection, kyphosis was corrected to 81° that enabled access to the cervical spine (left). In the second surgery, we extended fixation up to C3, and kyphosis angle was finally corrected to 50° (middle and right).

of soft tissue, and a posterior element such as the spinous interspinous ligament and use of more flexible rods and flap to cover the implants.

Conflicts of Interest: The authors declare that there are no relevant conflicts of interest.

Ethical Approval: None

Informed Consent: The patient was informed that data concerning the case would be submitted for publication, and she provided consent.

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