

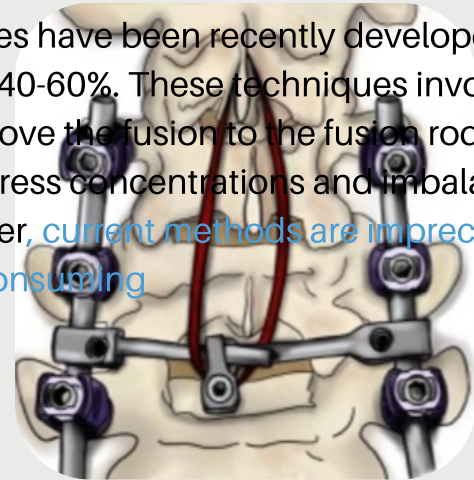
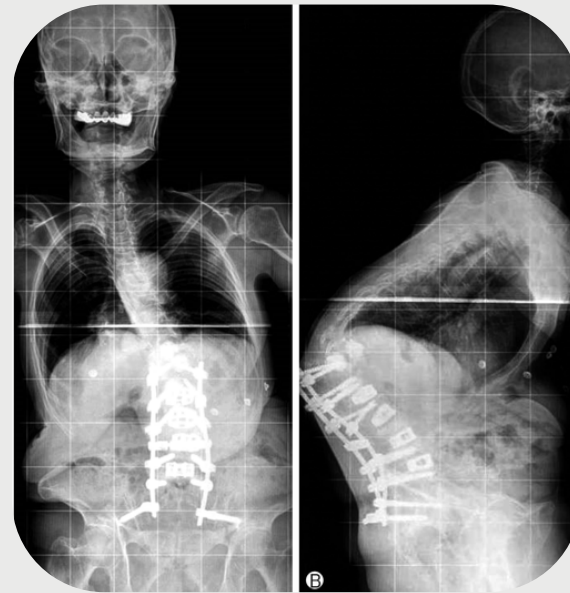
BACKGROUND

Spine fusion surgery involves the installation of screws and rods into a patients spine in order to stabilize a specific region.

Over the past 10 years, this procedure has seen a **250% increase in prevalence, with over 250,000 complex fusions done every year.** They're also extraordinarily risky. **Fusions have a complication rate of over 50%**

Proximal Junctional Kyphosis (PJK) is one of the most common of these complications. With PJK, the spine segment above the fused region bends forward dramatically due to the imbalance of forces caused by the fusion. **PJK occurs in 1 out of 4 complex fusion patients.**

Experimental techniques have been recently developed that reduce rates of PJK by 40-60%. These techniques involve tethering the region above the fusion to the fusion rods and screws to reduce the stress concentrations and imbalances that cause PJK. However, **current methods are imprecise, dangerous, and time consuming**



<https://pubmed.ncbi.nlm.nih.gov/33971008/>

<https://www.e-neurospine.org/journal/view.php?number=762>

In these methods, a hole is drilled into the spinous process, damaging supporting tissue. A band is then carefully woven between the bone and implants. It is then manually pulled taut and knotted together to tighten. This process can take between 30-45 minutes per patient

Evan Haas
Antony Fuleihan
Di Lu
Audrey Goo




CurveControl


Surgical Suite to Promote Sagittal Alignment with Dynamic Fixation


CurveControl is a surgical suite that provides the stress concentration reduction that experimental techniques do, but with **a safer, faster, and precise workflow.** The implant is composed of 3 elements

- 1 The upper end implant** quickly attaches to the vertebrae above the fused region. **Two different designs have been manufactured** to fit surgical preference - a pedicle screw insert or a transverse process hook
- 2 The band** provides the dynamic force that reduces the stress that causes PJK
- 3 The lower end implant attaches to the preexisting fusion implants.** The band is threaded and tightened to this section. Two different designs have been manufactured to fit surgical preference.

Value

 Safer, **no tissue destruction** required

 Faster, streamlined and simplified workflow takes **less than 5 minutes per patient**

 Precise, surgeons are able to **reliably set the force** applied every time



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If you have any questions, please contact _____