# **Case Report**

DETECTION AND
VISUALIZATION OF
NEUROCENTRAL
SYNCHONDROSIS
WITH DSG CONNECT

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### Case

8.5 years old patient (Fig.1) with progressive Early-Onset scoliosis; Major thoracic curve Risser 0-



Fig. 1

### **Treatment**

Posterior transmuscular instrumenation with trolley-type growth guiding construct.

## Pedicle Preparation: PediGuard® DSG Connect

The PediGuard DSG Connect probe is enabled with DSG® (Dynamic Surgical Guidance) Technology. It's a stand-alone, pedicle preparation instrument. A bipolar sensor is embedded at the tip of each PediGuard device. A low frequency and low voltage current is emitted through a bipolar electrode in the probe. Measuring the local conductivity of tissue 5 times per second, the device can accurately inform the surgeon of the type of tissue at its tip by changes in the pitch and cadence of an audio signal and a flashing LED light. Thus, the surgeon can be alerted of an imminent cortical breach and redirect appropriately during pedicle preparation.

Information about DSG Connect to add.



The PediGuard 2.5 XS probe was used during this case.

The PediGuard probe is used straight forward in manual techniques as the surgeon is used to with his standard pedicle awl.

## Pedicle Preparation Technique

All of the pedicles were cannulated using a DSG Connect PediGuard 2.5 XS probe and free-hand technique.





Fig.

## Postoperative Follow-up



Fig. 6





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