

# SPINAL CORD STIMULATORS (SCS) AND MRI SCANNING: IS OUR PRACTICE ADEQUATE?



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## Objectives

SCS has clear benefits however, not all implants are MRI compatible, which can be problematic if the patient needs one. Current guidelines regarding SCS do not stipulate investigations required prior to implanting. The annual prevalence rate of explantation to facilitate a MRI is estimated to be less than 0.5% from the Boston Scientific complaint database. We present a series of patients who were thought to be likely to need an MRI in the future so were implanted with MRI compatible kit.

## Methods

All patients in our centre have a whole spine MRI prior to implant. A multidisciplinary team including neurosurgeons and a radiologist reviews the scan to assess if the patient has any contraindications to a SCS and if they are likely to need a MRI in the future. Depending on the outcome either a MRI compatible or non-compatible SCS is implanted. These patients are kept on a separate database.

## Results

13 patients were deemed likely to need a MRI in the future. The findings were incidental and included cervical nerve root and theca compressions, a potential neurogenic tumour and prominent extension of the cerebral tonsils through the foramen magnum.

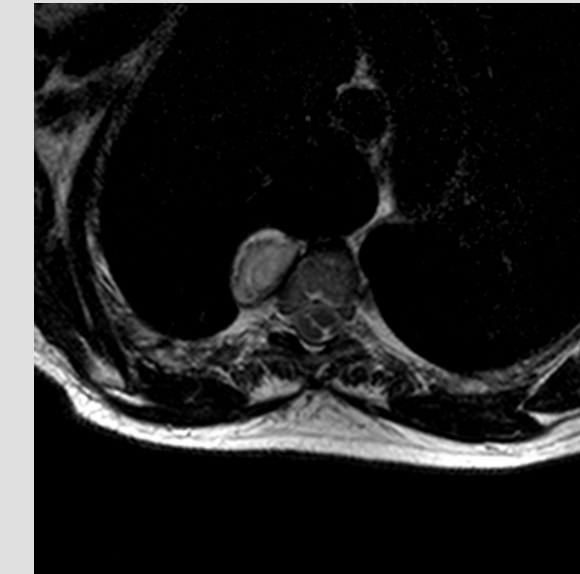


Fig 1. Showing an incidental mediastinal tumour

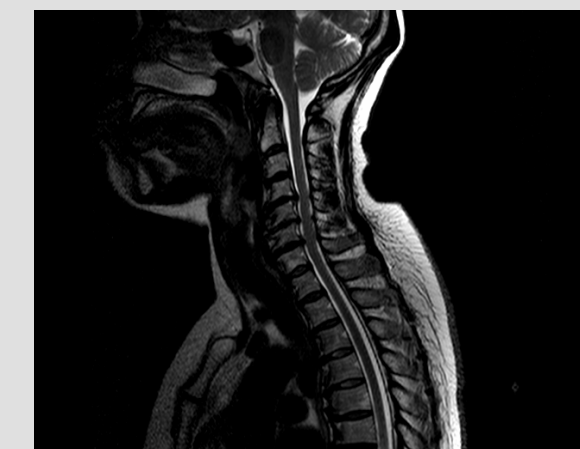


Fig 2 Showing a C5/6, C6/7 osteophytic disc indenting the theca. Th

## Conclusions

We have a duty of care to ensure our patients get the best possible care whilst remaining cost effective. Most clinicians perform a MRI on the area where the implant lead will be positioned however our results show this may not be adequate. We are continuing to follow these patients up and will present 5 year data to see the relevance of our findings.

## References

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