## INTRODUCTION

Anterior cervical discectomy with fusion (ACDF) is the gold standard for the treatment of degenerative cervical pathology. In the long term, it can present complications such as pseudarthrosis or adjacent disc disease. To solve them, we can use reintervention via the anterior approach with possible complications or the posterior approach with significant involvement of the retrosomatic muscles. In this sense, the percutaneous posterior fusion technique (with the DTRAX system) can help mitigate these problems.

## MATERIAL AND METHODS

The DTRAX technique consists of posterior percutaneous cervical interfacetal fusion by inserting a device between the two facets of the joint after the cartilage has been cut. In addition, it allows the enlargement of the foramen area through indirect decompression.

Since 2016 we have used the DTRAX technique in 25 patients, 10 in primary pathology and 15 in revision. The parameters studied were the Cervical Disability Index (NDI), Visual Analogue Scale (VAS) for cervical and brachial pain, satisfaction at 12 months. At the radiological level, we study the movement between the spinous processes, the presence of bone bridges, the sagittal alignment and the retention of the device. Other parameters have been blood loss, surgical time and length of hospital stay.

## RESULTS

At 24 months, the NDI decreased from 60.4±19.1 to 28.5±15.6. Cervical VAS from 7.6±1.7 to 3.6±2.3 and brachial from 7.2±1.9 to 3.2±2.4. Patient satisfaction was good or very good in all cases. Only one implant was partially mobilized at three months with retropulsion of 1.5 mm without clinical repercussion. No movement was seen between the spinous processes. The presence of evident bone bridges was confirmed in 18 cases and the sagittal angle of the treated level decreased by 0.9º on average. The mean duration of the surgical procedure was 68 minutes. Blood loss of less than 50 cc in all cases. The mean hospital stay was 37.6 h.

## CONCLUSION

The DTRAX technique can be used safely in the treatment of complications such as pseudoarthrosis or the adjacent level, as well as for selected cases of cervical or radicular pain, with good clinical and radiological results.