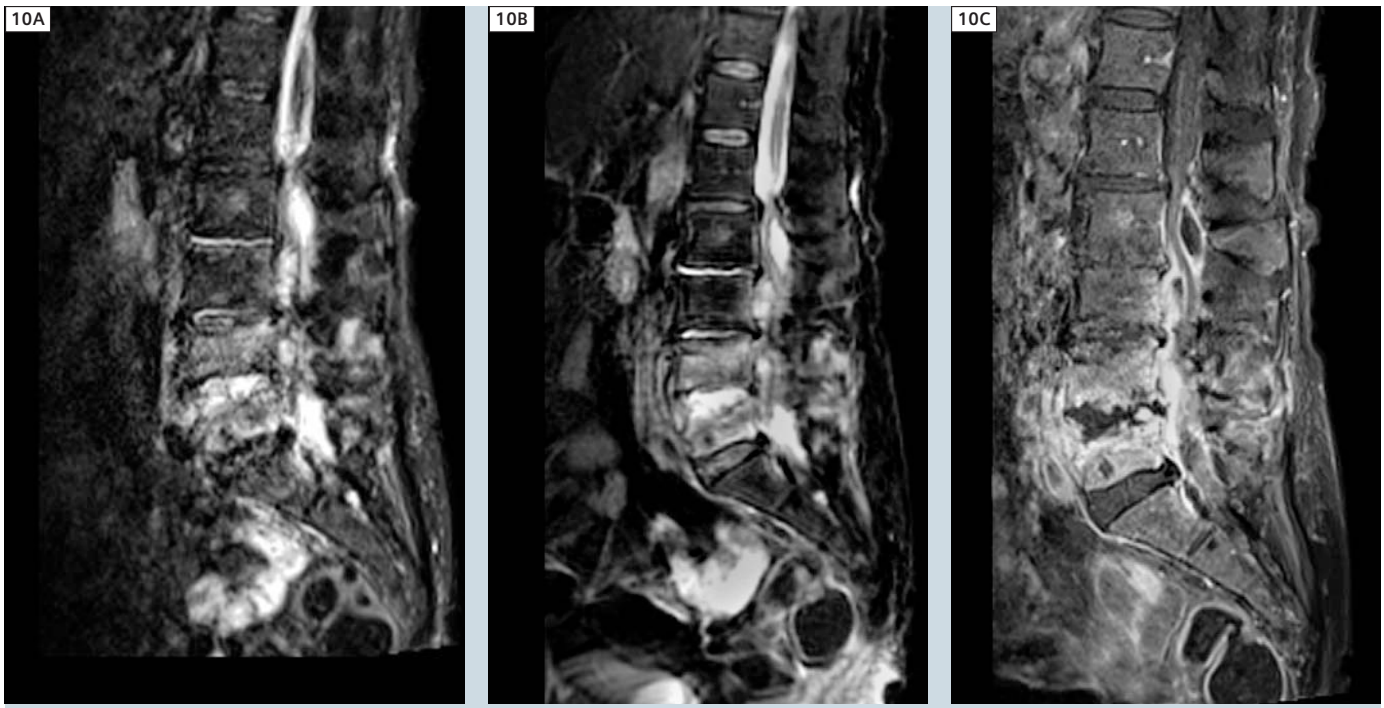

10 **A)** T2w sagittal with severe motion artifacts. **B)** T2w sagittal with *syngo* BLADE technique. **C)** ce T1w sagittal with fat saturation.

Case 10

Results of an MRI scan of an 87-year-old female patient with dementia and severe back pain are shown. Severe motion artifacts were present (Fig. 10A) but could be compensated by applying motion-insensitive (*syngo* BLADE; Fig. 10B) MR sequences and fast sequences with parallel imaging (post-contrast T1w image; Fig. 10C). Spondylodiscitis and complete destruction of the intervertebral space of L5/4 is seen. In addition, multiple epidural abscesses can be seen. The patient underwent surgery with dorsal and ventral spine fusion, open discectomy and laminectomy as well as drainage.

Conclusion

Although the adoption to the higher field strength of 3T, new coil technology and multi-region exams were challenges to radiologists, technologist and referring clinicians and do require a (short) transition phase, the clinical advantages are significant, as shown with this case series. After approximately one year of operation, the installation of the 3T open bore system with TrueForm technology has clearly improved our diagnostic potential as well as widened the indications for MRI and has lead to improved patient care. The system is therefore well received among our clinical colleagues, resulting also in a significant increase of referrals during the last year. In addition, the patient comfort of the open bore system has resulted in a higher acceptance of MRI by patients.

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References

1 Fries P, Runge VM, Kirchin MA, Watkins DM, Buecker A, Schneider G. Magnetic resonance imaging of the spine at 3 Tesla. Semin Musculoskelet Radiol. 2008 Sep;12(3):238-52.
2 Baudendistel KT, Heverhagen JT, Knopp MV. Clinical MR at 3 Tesla: current status. Radiologe 2004;44(1):11-8.

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