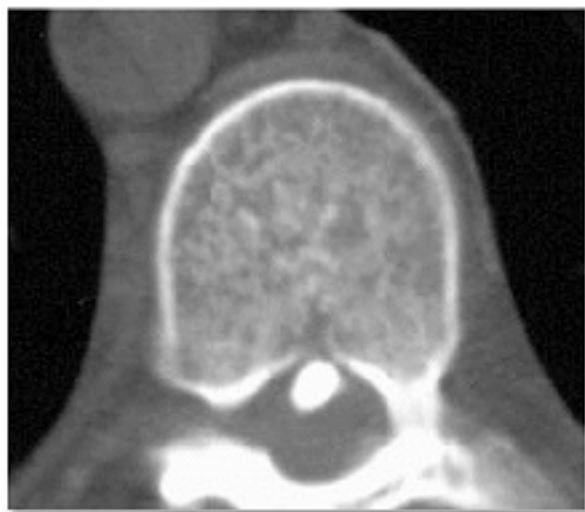


Introduction:

Dorsal Disc Herniation [DDH] is an uncommon pathological condition (1-2 cases per million of the population per year). The lower dorsal spine (D8-D11) seems more affected than the upper tract, calcifications and osteophytic ridges are pathognomonic characteristics. DDH is still an open chapter in spinal surgery because of the technical problems due to the proximity to the spinal cord and its vascular supply. Herein we report on a bilateral transpedicular approach [BTPA] followed by spinal stabilization as an alternative posterior approach for the treatment of DDH.



Exemplificative case: D10-D11 calcified DDH (see pre-op MRI and CT scan, on left), successfully treated by BTPA (see post-op MRI at 4y Follow-Up, above)



Methods:

From 1999 to 2009 a total of 9 patients harbouring 10 DDH were admitted to the Chair of Neurosurgery at the University of Cagliari (Italy). Using the departmental database we have collected and analyzed both clinical and surgical data by reviewing in toto the dossier of each patient, from medical records to intraoperative photos.

Results:

No one of this patients had undergone spinal surgery previously nor have had antecedent of spinal traumas. Every patient was paraparetic, but no one had sphincter dysfunction. The interval between onset of symptoms and operation ranged between 1 year to 3 months. The surgical strategy included a BTPA, which allowed for a complete removal of the DDH even if calcified or centrally located, and was eventually followed by posterior stabilization in each patient. Total operation time was on average 155' (DS 30'), and estimated blood loss was on average 400cc. No major complication was registered during or after surgery. At discharge from the ward all patients referred a remarkable improvement of symptoms yet. No radiological evidence of spinal instability was detected even at late follow up (mean 3.7y, range: 2-7y).

Conclusions:

From our personal experience BTPA emerge as an easy and effective procedure for surgical decompression and functional vertebral stabilization in symptomatic patients with DDH.